Service Manual

Stereo DC Control Amplifier

SU-A6(K)

[E],[EG],[EK],
[EF],[EH],[XA],[XL]

* The black type model is provided with (K) in the Service Manual. SU-A6 (K)
* The colors of this model is black type only.

Areas

* [E] and [EG] are available in Scandinavia and European except United Kingdom, France and Holland.
* [EK] is available in United Kingdom.
* [EF] is available in France.
* [EH] is available in Holland.
* [XA] is available in Asia, Latin America, Middle East and Africa.
* [XL] is available in Australia.

English

Specifications (Specifications are subject to change without notice for further improvement.)

(DIN 45 500)

■ AMPLIFIER SECTION

Total harmonic distortion (20 Hz~20 kHz)	
PHONO MM (2.5 mV)	0.002% (3V output at vol. max.) (0.5V output at vol. −30dB: 0.002%)
PHONO MC (250μV)	0.003% (3V output at vol. max.) (0.5V output at vol. −30 dB: 0.006%)
TUNER, AUX, TAPE	0.002% (3V output at vol. max.) (0.5V output at vol. −30 dB: 0.002%)
Input sensitivity and impedance	
PHONO MM	1.0 mV, 2.5mV/47kΩ
MC	100μV/100Ω, 250μV/220Ω
TUNER, AUX, TAPE	150 mV/47kΩ
PHONO maximum input voltage (1 kHz, RMS)	
PHONO 1, 2 MM (2.5 mV)	160 mV
MC (250μV)	16 mV
S/N	
rated output	
PHONO MM (2.5 mV)	79 dB (88 dB, IHF, '66)
MC (250μV)	71 dB (74 dB, IHF, '66)
TUNER, AUX, TAPE	100 dB (106 dB, IHF, '66)
−26 dB output	
PHONO MM (2.5 mV)	78 dB
MC (250μV)	70 dB
TUNER, AUX, TAPE	86 dB
Frequency response	
PHONO 1, 2 MM	RIAA standard curve ±0.2 dB
MC	RIAA standard curve ±0.5 dB
TUNER, AUX, TAPE	DC~200 kHz (−3 dB) +0 dB, −0.1 dB (DC~20 kHz)
Maximum output voltage	
PHONO MM	8V (20 Hz~20 kHz)
PHONO MC	8V (20 Hz~20 kHz)
TUNER, AUX, TAPE	8V (20 Hz~20 kHz)
Tone controls	
BASS	50 Hz, +5 dB~ −5 dB
SUPER BASS	20 Hz, +10 dB~0 dB
TREBLE	20 kHz, +5 dB~ −5 dB
SUPER TREBLE	50 kHz, +10 dB~−10 dB
Turnover frequency	
BASS	500 Hz
SUPER BASS	75 Hz, 150 Hz
TREBLE	2 kHz
SUPER TREBLE	8 kHz
Subsonic filter	20 Hz, −12 dB/oct.
High-filter	7 kHz, −6 dB/oct.
Loudness control (volume at −30 dB)	50 Hz, +7 dB
Muting	−20 dB
Output voltage and impedance	
PRE OUT	rated 2V/2Ω
REC OUT	150 mV/600Ω
Channel balance, AUX 250 Hz~6,300 Hz	±1 dB
Channel separation, AUX 1 kHz	56 dB

■ GENERAL

Power consumption	10W
Power supply	AC 50 Hz/60 Hz, 110V/120V/220V/240V
Dimensions (W·H·D)	430 × 97 × 360 mm (16-15/16" × 3-13/16" × 14-3/16")
Weight	5.5 kg (12 lb.)

Note:
Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Technics

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

Deutsch

TECHNISCHE DATEN (Spezifikationen Können infolge von Verbesserungen ohne Ankündigung geändert werden.)

(DIN 45 500)

■ VERSTÄRKERTEIL

Gesamtklirrfaktor (20 Hz ~ 20 kHz)
- **Phono - magnetisch (PHONO MM) (2,5 mV)** 0,002%
  (3 V Ausgangsspannung bei Höchstleistung)
  (0,5 V Ausgangsspannung bei −30 dB Leistung: 0,002%)
- **Phono - dynamisch (PHONO MC) (250 μV)** 0,003%
  (3 V Ausgangsspannung bei Höchstleistung)
  (0,5 V Ausgangsspannung bei −30 dB Leistung: 0,006%)
- **Tuner, Aux, Tape** 0,002%
  (3 V Ausgangsspannung bei Höchstleistung)
  (0,5 V Ausgangsspannung bei −30 dB Leistung: 0,002%)

Eingangsempfindlichkeit und -impedanz
- **Phono - magnetisch (PHONO MM)** 1,0 mV, 2,5 mV/47 kΩ
- **Phono - dynamisch (PHONO MC)** 100 μV/100Ω, 250 μV/220 Ω
- **Tuner, Aux, Tape** 150 mV/47 kΩ

Maximale TA-Eingangsspannung (1 kHz, eff.)
- **magnetisch (MM) 1,2 (2,5 mV)** 160 mV
- **dynamisch (MC) (250 μV)** 16 mV

Geräuschabstand
- **Nennausgang**
  - **Phono - magnetisch (PHONO MM) (2,5 mV)** 79 dB (88 dB nach IHF, '66)
  - **Phono - dynamisch (PHONO MC) (250 μV)** 71 dB (74 dB nach IHF, '66)
  - **Tuner, Aux, Tape** 100 dB (106 dB nach IHF, '66)
- **−26 dB Ausgang**
  - **Phono - magnetisch (PHONO MM) (2,5 mV)** 78 dB
  - **Phono - dynamisch (PHONO MC) 250 μV)** 70 dB
  - **Tuner, Aux, Tape** 86 dB

Frequenzgang
- **Phono 1, 2 MM** RIAA-Standardkurve ±0,2 dB
- **Phono MC** RIAA-Standardkurve ±0,5 dB
- **Tuner, Aux, Tape** DC ~ 200 kHz (−3 dB)
  +0 dB, −0,1 dB (DC ~ 20 kHz)

Maximale Ausgangsspannung
- **Phono MM** 8 V (20 Hz ~ 20 kHz)
- **Phono MC** 8 V (20 Hz ~ 20 kHz)
- **Tuner Aux, Tape** 8 V (20 Hz ~ 20 kHz)

Klangregler
- **Baßregler (BASS)** 50 Hz, +5 dB ~ −5 dB
- **Tiefbaßreglers (SUPER BASS)** 20 Hz, +10 dB ~ 0 dB
- **Höhenregler (TREBLE)** 20 kHz, +5 dB ~ −5 dB
- **Überhöhenregler (SUPER TREBLE)** 50 kHz, +10 dB ~ −10 dB

Übergangsfrequenz
- **Baßregler (BASS)** 500 Hz
- **Tiefbaßreglers (SUPER BASS)** 75 Hz, 150 Hz
- **Höhenregler (TREBLE)** 2 kHz
- **Überhöhenregler (SUPER TREBLE)** 8 kHz

Tiefenfilter 20 Hz, −12 dB/Okt.
Rauschfilter 7 kHz, −6 dB/Okt.
Gehörrichtige Lautstärkekorrektur (Loudness)
(bei −30 dB Ausgangsleistung) 50 Hz, +7 dB
Tondämpfung −20 dB
Ausgangsspannung und -impedanz
- **Vorverstärker (PRE OUT)** Nennspg. 2 V/2 Ω
- **Aufnahmeausgang (REC OUT)** 150 mV/600 Ω

Kanalabweichung (Aux, 250 Hz ~ 6300 Hz) ±1 dB
Übersprechdämpfung (Aux, 1 kHz) 56 dB

■ ALLGEMEINE DATEN

Leistungsaufnahme 10 W
Netzspannung
Wechselstrom 50 Hz/60 Hz, 110V/120V/220V/240V
Abmessungen (B×H×T) 430 × 97 × 360 mm
Gewicht 5,5 kg

Bemerkung:
Der Gesamtklirrfaktor wurde mit einem digitalen Rauschspektrometer (Anlage H.P. 3045) gemessen.

Français

CARACTERSTIQUES (Sujet á changement sans préaris.)

(DIN 45 500)

■ SECTION AMPLIFICATEUR

Distorsion harmonique totale (20 Hz~20 kHz)
- **PHONO, AIMANT MOBILE (PHONO MM) (2,5 mV)** 0,002%
  (sortie de 3 V à vol. max.)
  (sortie de 0,5V à vol. −30 dB: 0,002%)
- **PHONO, BOBINE MOBILE (PHONO MC) (250 μV)** 0,003%
  (sortie de 3 V à vol. max.)
  (sortie de 0,5V à vol. −30 dB: 0,006%)
- **SYNTONISATEUR, AUX, BANDE (TUNER, AUX, TAPE)** 0,002%
  (sortie de 3 V à vol. max.)
  (sortie de 0,5V à vol. −30 dB: 0,002%)

Sensibilité et impédance d'entrée
- **PHONO, AIMANT MOBILE (PHONO MM)** 1,0 mV, 2,5 mV/47kΩ
- **PHONO, BOBINE MOBILE (PHONO MC)** 100 μV/100Ω, 250 μV/220Ω
- **SYNTONISATEUR, AUX, BANDE (TUNER, AUX, TAPE)** 150 mV/47kΩ

PHONO (tension d'entrée maximum, 1 kHz RMS)
- **AIMANT MOBILE (MM) 1, 2 (2,5 mV)** 160 mV
- **BOBINE MOBILE (MC) (250 μV)** 16 mV

Signal/Bruit
- **sortie nominale**
  - **PHONO, AIMANT MOBILE (PHONO MM) (2,5 mV)** 79 dB (88 dB, IHF, '66)
  - **PHONO, BOBINE MOBILE (PHONO MC) (250 μV)** 71 dB (74 dB, IHF, '66)
  - **SYNTONISATEUR, AUX, BANDE (TUNER, AUX, TAPE)** 100 dB (106 dB, IHF, '66)
- **sortie de −26 dB**
  - **PHONO, AIMANT MOBILE (PHONO MM) (2,5 mV)** 78 dB
  - **PHONO, BOBINE MOBILE (PHONO MC) (250 μV)** 70 dB
  - **SYNTONISATEUR, AUX, BANDE (TUNER, AUX, TAPE)** 86 dB

Réponse de fréquence
- **PHONO 1, 2 MM** Courbe nominale RIAA ±0,2 dB
- **PHONO MC** Courbe nominale RIAA ±0,5 dB
- **SYNTONISATEUR, AUX, BANDE (TUNER, AUX, TAPE)** CC~200 kHz (−3 dB)
  +0 dB, −0,1 dB (CC~20 kHz)

Tension de sortie maximum	
PHONO MM	8V (20 Hz~20 kHz)
PHONO MC	8V (20 Hz~20 kHz)
TUNER, AUX, TAPE	8V (20 Hz~20 kHz)
Réglage de la tonalité	
BASSES (BASS)	50 Hz, +5 dB~ −5 dB
ULTRA-BASSES (SUPER BASS)	20 Hz, +10 dB~0 dB
AIGUS (TREBLE)	20 kHz, +5 dB~ −5 dB
ULTRA-AIGUES (SUPER TREBLE)	50 kHz, +10 dB~ −10 dB
Fréquence charnière	
BASSES (BASS)	500 Hz
ULTRA-BASSES (SUPER BASS)	75 Hz, 150 Hz
AIGUES (TREBLE)	2 kHz
ULTRA-AIGUES (SUPER TREBLE)	8 kHz
Filtre subsonique	20 Hz, −12 dB/oct.
Filtre coupe-hauts	7 kHz, −6 dB/oct.
Compensateur physiologique (volume à −30 dB)	50 Hz, +7 dB
Réglage silencieux	−20 dB
Tension de sortie et impédance	
PREAMPLI (PRE OUT)	nominale 2V/2Ω
SORTIE ENREGISTREMENT (REC OUT)	150 mV/600Ω
Equilibrage des canaux, AUX 250 Hz~6 300 Hz	±1 dB
Séparation des canaux, AUX 1 kHz	56 dB

■ DIVERS

Consommation	10W
Alimentation	CA 50 Hz/60 Hz, 110V/120V/220V/240V
Dimensions (L×H×Pr)	430 × 97 × 360 mm
Poids	5.5 kg

Remarque:
On mesure la distorsion harmonique totale au moyen d'un analyseur de spectre digital (Système HP. 3045).

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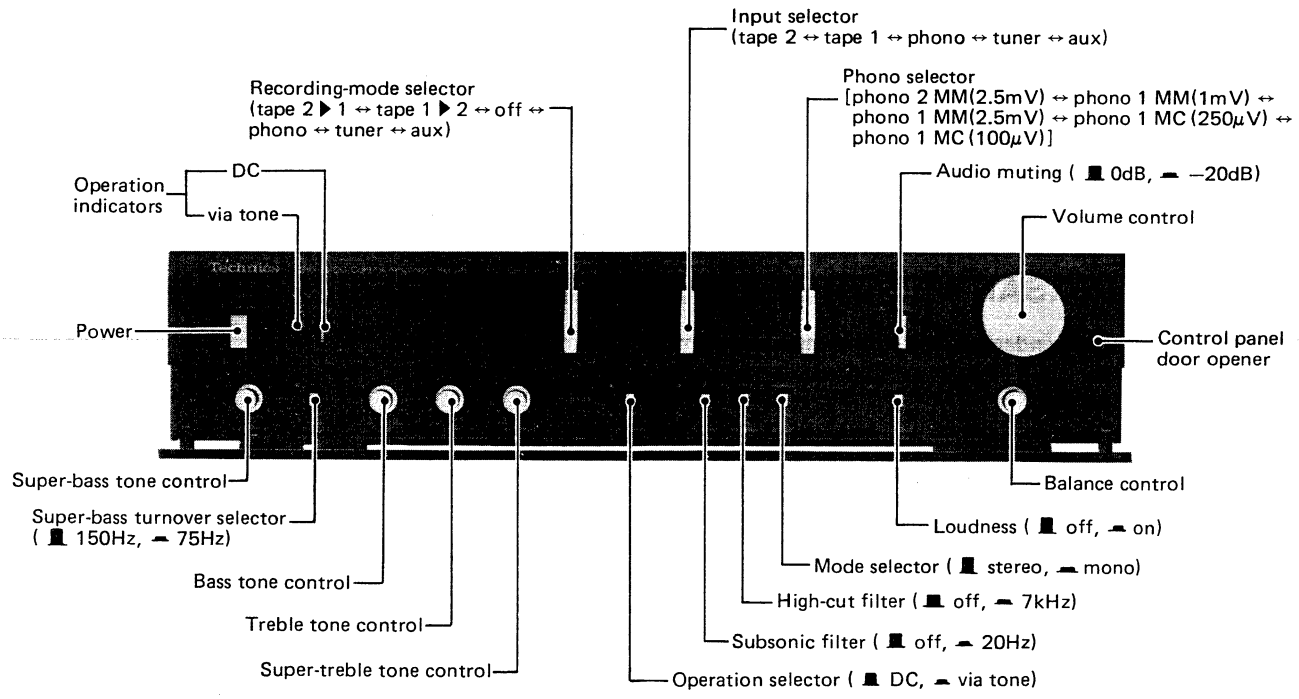
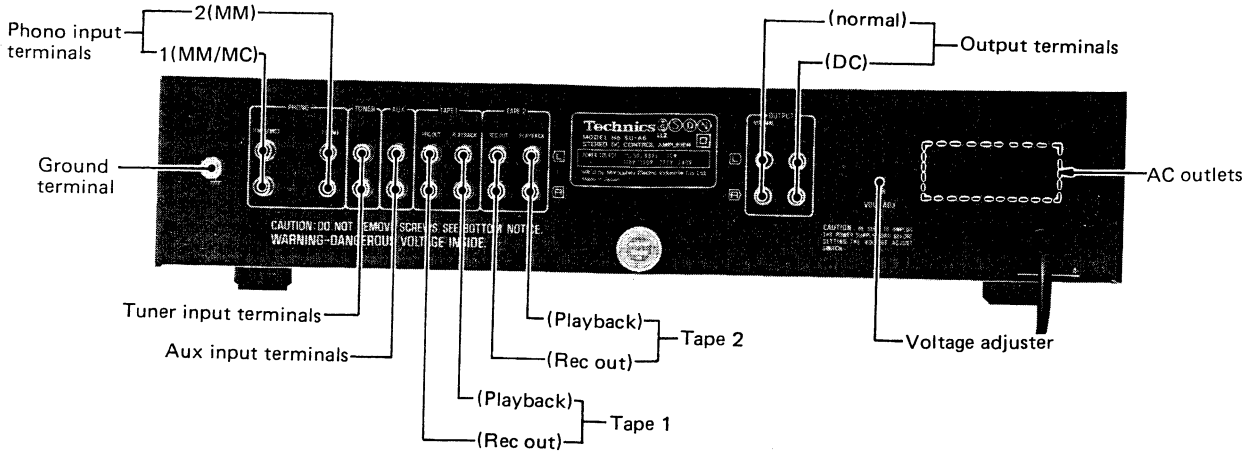
■ LOCATION OF CONTROLS


Input selector
(tape 2 ↔ tape 1 ↔ phono ↔ tuner ↔ aux)
Recording-mode selector
(tape 2 ▶ 1 ↔ tape 1 ▶ 2 ↔ off ↔
phono ↔ tuner ↔ aux)
Phono selector
[phono 2 MM(2.5mV) ↔ phono 1 MM(1mV) ↔
phono 1 MM(2.5mV) ↔ phono 1 MC(250μV) ↔
phono 1 MC(100μV)]
Operation indicators
DC
via tone
Audio muting (0dB, −20dB)
Volume control
Power
Control panel door opener
Super-bass tone control
Super-bass turnover selector
(150Hz, 75Hz)
Balance control
Loudness (off, on)
Bass tone control
Mode selector (stereo, mono)
High-cut filter (off, 7kHz)
Treble tone control
Subsonic filter (off, 20Hz)
Super-treble tone control
Operation selector (DC, via tone)



- The products for destination [XA] is equipped with AC outlets.

MEASUREMENTS AND ADJUSTMENTS — ENGLISH

- **Setting of controls and instruments to be used.**
  1. Operation switch . . . . . DC
  2. Input selector switch . . . tuner
  3. DC voltmeter (able to measure 1mV)

No.	Adjustments	DC voltmeter connections	Adjusting points	Adjustment procedure
1	Voltage regulator	Between TP701 and ground	VR701	• Turn voltage regulator semi-fixed resistor VR701 to minimum. (counter-clockwise direction) • Adjust VR701 to 17V.
2	Buffer amplifier DC balance adj.	(L channel) Between DC output terminal (Lch) and ground (R channel) Between DC output terminal (Rch) and ground	VR601 (L channel) VR602 (R channel)	• Turn volume control to minimum. • Adjust VR601 (Lch) and VR602 (Rch) to obtain a minimum reading, using the 300mV range on the DC voltmeter.
3	Flat amplifier DC balance adj.	(L channel) Between DC output terminal (Lch) and ground (R channel) Between DC output terminal (Rch) and ground	VR501 (L channel) VR502 (R channel)	• Turn volume control to maximum. • Adjust VR501 (Lch) and VR502 (Rch) obtain a minimum reading, using the 300mV range on the DC voltmeter.

EINSTELLUNGSANWEISUNGEN — DEUTSCH

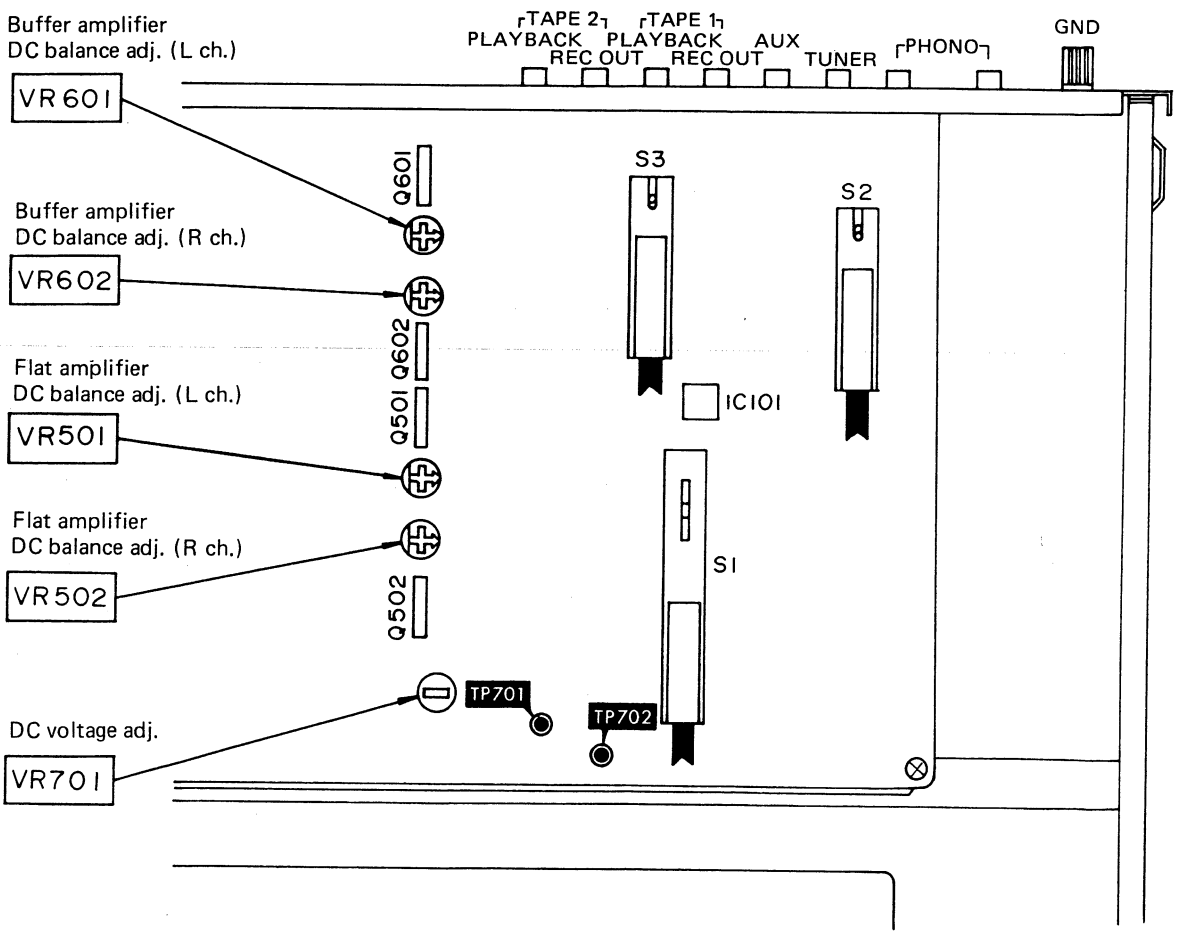
- **Einstellung der zu verwendenden Regler und Instrumente**
  1. Funktionsschalter . . . . . "DC"
  2. Eingangswahlschalter . . . . . tuner
  3. Gleichstromvoltmeter . . . . . 1mV Meßbereich erforderlich

Nr.	Einstellungen	Gleichstromvoltmeter-verbindungen	Einstellungspunkte	Einstellungsvorgang
1	Spannungsregler	Zwischen TP701 und Masse.	VR701	• Die spannungsregler halbfesteingestellten Widerstände VR701 auf Minimalstellung drehen. (Entgegen dem Uhrzeigersinn) • VR701 auf 17V abstimmen.
2	Gleichstrom balance	L-Kanal Zwischen DC ausgangsbuchsen (L-Kanal) und Erdungsanschluß R-Kanal Zwischen DC ausgangsbuchsen (R-Kanal) und Erdungsanschluß	VR601 (L-Kanal) VR602 (R-Kanal)	• Lautstärkeregler ganz heruntèrdrehen. • Durch Benutzung des 300mV-Bereiches des Gleichstromvoltmeters, den regelbaren Widerständ VR601 (L-Kanal) und VR602 (R-Kanal) auf minimalen Wert einstellen.
3		L-Kanal Zwischen DC ausgangsbuchsen (L-Kanal) und Erdungsanschluß R-Kanal Zwischen DC ausgangsbuchsen (R-Kanal) und Erdungsanschluß	VR501 (L-Kanal) VR502 (R-Kanal)	• Lautstärkeregler ganz aufdrehen. • Durch Benutzung des 3mV-Bereiches des Gleichstromvoltmeters, dem regelbaren Widerständ VR501 (L-Kanal) und VR502 (R-Kanal) auf minimalen Wert einstellen.

- **Réglage des commandes et des appareils á utilier**
  1. Sélecteur de fonctionnement . . . "DC"
  2. Sélecteur d'entrée . . . . . tuner
  3. Voltmètre CC (pouvant mesurer 1mV)

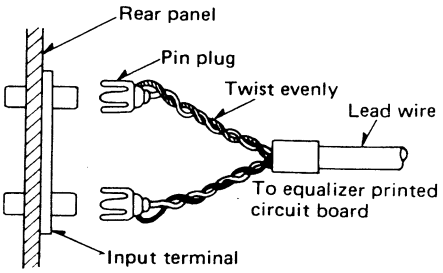
No.	Réglages	Connexions du voltmetre CC	Point de réglage	Procédé de réglage
1	Régulateur de potential	Entre TP701 et la masse	VR701	• Tourner les résistances VR701 semifixes regulateur de potentiol sur le minimum. (à gauche) • Régler les VR701 sur 17V.
2	Equilibre CC	(Canal de gauche) Entre la borne de sortie C.C. (canal de gauche) et la masse. (Canal de droite) Entre la borne de sortie C.C. (canal de droite) et la masse.	VR601 (Canal gauche) VR602 (Canal droit)	• Tourner la commande de volume au minimum. • Régler VR601 (Canal gauche) et VR602 (Canal droit) pour obtenir une lecture minimale, à l'aide de la gamme de 300mV sur le voltmètre CC.
3		(Canal de gauche) Entre la borne de sortie C.C. (canal de gauche) et la masse. (Canal de droite) Entre la borne de sortie C.C. (canal de droite) et la masse.	VR501 (Canal gauche) VR502 (Canal droit)	• Tourner la commande de volume au maximum. • Régler VR501 (Canal gauche) et VR502 (Canal droit) pour obtenir une lecture minimale, à l'aide de la gamme de 3mV sur le voltmètre CC.

- **Adjustment points**



■ PRECAUTIONS FOR REPAIR

The S/N ratio of the equalizer circuit may be influenced depending on the way of lead wire arrangement. So after repair of this circuit, twist the leads of phono 1 and 2 evenly 5 or 6 times before connecting them to the terminals. Such may decrease the hum level. (See Fig. 1)



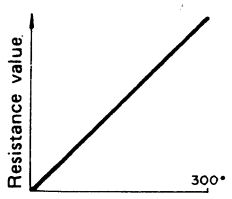
[Fig. 1]

■ VARIABLE RESISTORS

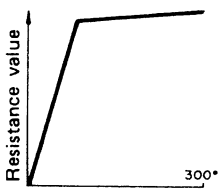
• Alteration of resistance values according to the rotational angles of variable resistors

Alteration characteristics as shown below are often used for sets. All are intended to keep the frequency response of the set at optimum levels, and are used according to the types of circuits. For example, characteristic (B) is used for sound volume adjustment; (A) and (C) are for bass and treble sound quality adjustment; (G) is for medium sound quality adjustment; and (BH) is for the adjustment of sound balance between the right and left.

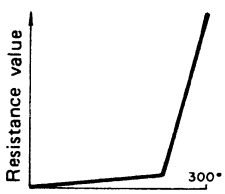
In the case of this unit, variable resistor with characteristic (C) which is short-circuited between its ends at rotational angle of 150° (center) is used for bass adjustment. Also, variable resistor with characteristic (C) whose resistance is zero at rotational angle of 150° (center) is used for treble adjustment. And characteristic (BH) in which two variable resistors are interlocked with characteristics (C) and (A) combined is used for the adjustment of sound level balance.



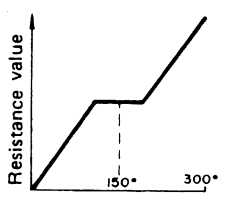
Characteristic (B)



Characteristic (C)

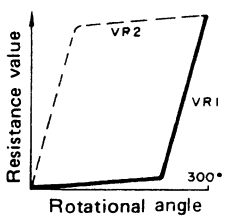


Characteristic (A)

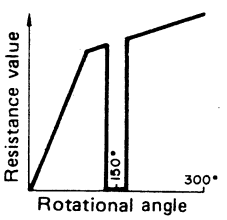


Characteristic (G)

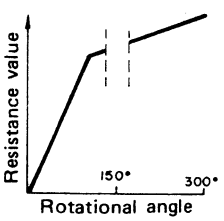
VR1 is inter locked with VR2



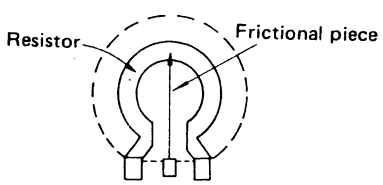
Characteristic (BH)

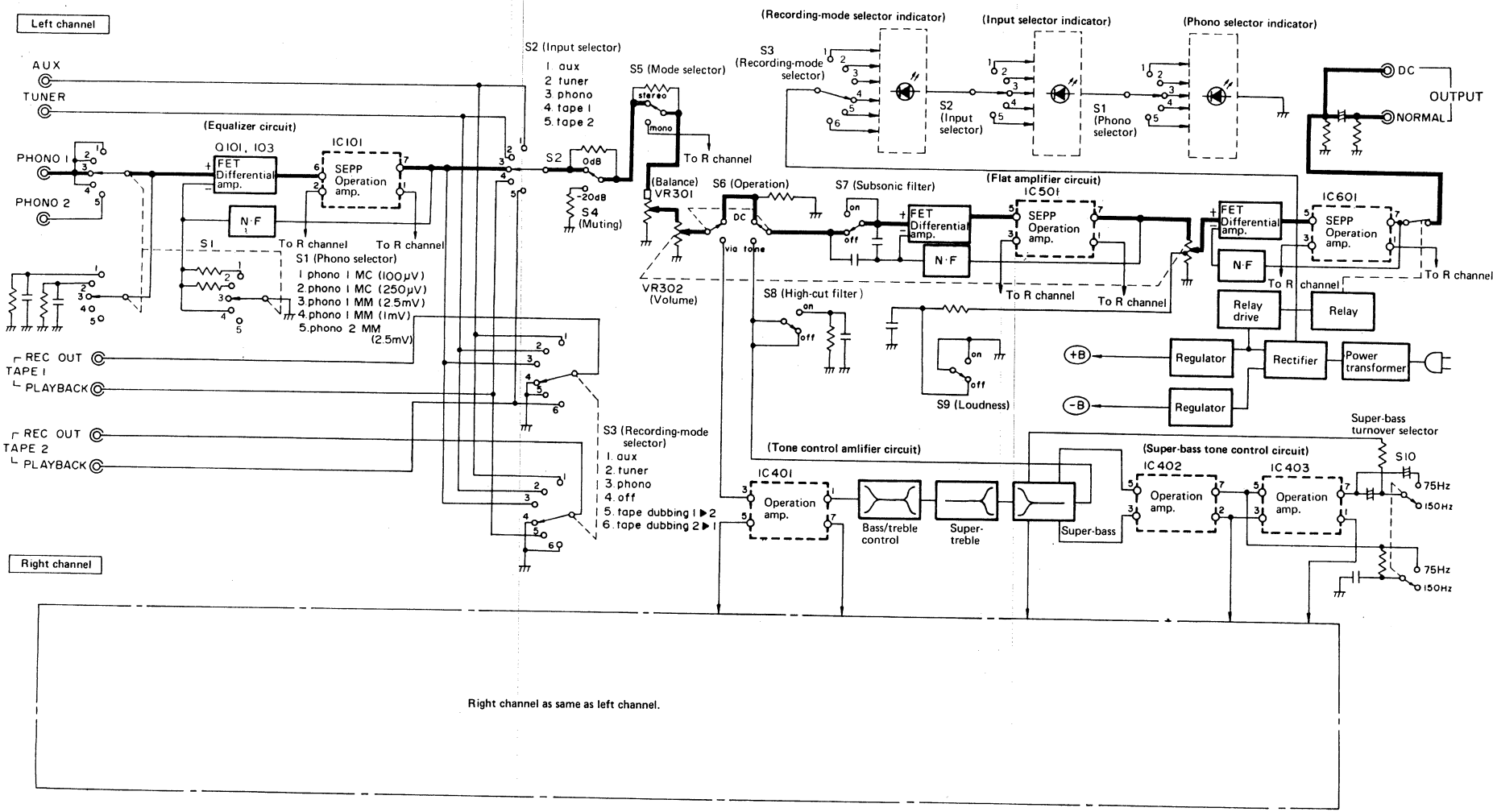


Characteristic (C): short-circuited at center

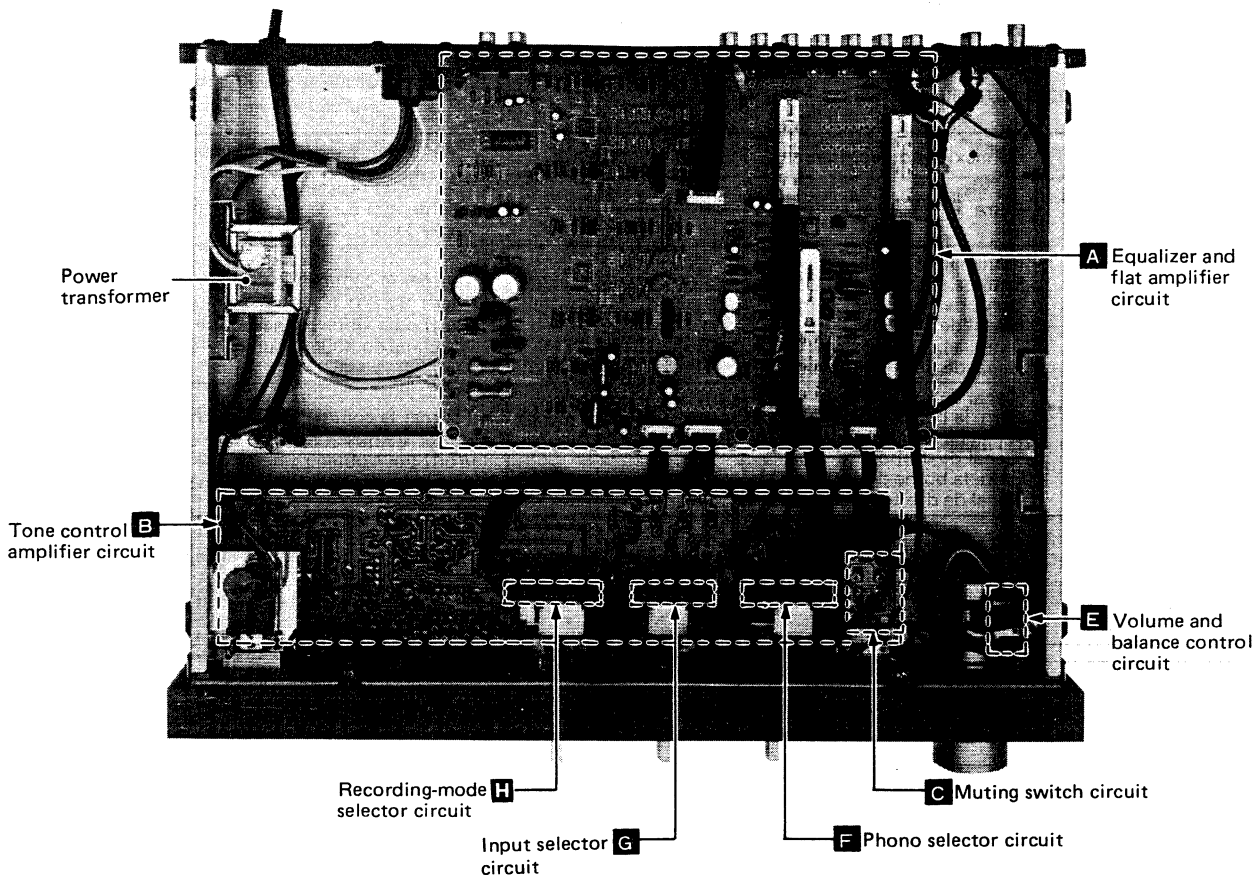


Characteristic (C): opened at center




Left channel
AUX
TUNER
PHONO 1
PHONO 2
(Equalizer circuit)
Q101, 103
FET Differential amp.
IC101
SEPP Operation amp.
N·F
S1
To R channel
To R channel
S1 (Phono selector)
1 phono 1 MC (100μV)
2 phono 1 MC (250μV)
3 phono 1 MM (2.5mV)
4 phono 1 MM (1mV)
5 phono 2 MM (2.5mV)
REC OUT
TAPE 1
PLAYBACK
REC OUT
TAPE 2
PLAYBACK
S2 (Input selector)
1 aux
2 tuner
3 phono
4 tape 1
5 tape 2
S2
0dB
-20dB
S4 (Muting)
S5 (Mode selector)
stereo
mono
To R channel
(Balance) VR301
VR302 (Volume)
S6 (Operation)
DC
via tone
S7 (Subsonic filter)
on
off
S8 (High-cut filter)
on
off
S9 (Loudness)
S3 (Recording-mode selector)
1. aux
2. tuner
3. phono
4. off
5. tape dubbing 1▶2
6. tape dubbing 2▶1
(Recording-mode selector indicator)
S3 (Recording-mode selector)
(Input selector indicator)
S2 (Input selector)
(Phono selector indicator)
S1 (Phono selector)
(Flat amplifier circuit)
IC501
FET Differential amp.
SEPP Operation amp.
N·F
IC601
FET Differential amp.
SEPP Operation amp.
N·F
To R channel
To R channel
To R channel
To R channel
DC
NORMAL
OUTPUT
Relay drive
Relay
+B
-B
Regulator
Regulator
Rectifier
Power transformer
(Tone control amlifier circuit)
IC401
Operation amp.
Bass/treble control
Super-treble
Super-bass
(Super-bass tone control circuit)
IC402
Operation amp.
IC403
Operation amp.
Super-bass turnover selector
S10
75Hz
150Hz
75Hz
150Hz
Right channel
Right channel as same as left channel.

■ PRINTED CIRCUIT BOARDS LOCATION


Power transformer
A Equalizer and flat amplifier circuit
Tone control B amplifier circuit
E Volume and balance control circuit
Recording-mode H selector circuit
Input selector G circuit
C Muting switch circuit
F Phono selector circuit

■ REPLACEMENT PARTS LIST ····· Electrical Parts

Notes: 1. Parts numbers are indicated on most mechanical parts.
Please use this part number for parts orders.
2. Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety,
When replacing any of these components, use only manufacturer's specified parts.

Ref. No.		Part No.	Part Name & Description
INTEGRATED CIRCUITS			
IC101, 401, 501, 601		SVINJM4559DS	IC, Phono Equalizer and Operation Amplifier
IC402, 403		AN6552F	IC, Operation Amplifier
TRANSISTORS			
Q101~104		2SK146-BL	Transistor, Equalizer Differential Amplifier
Q501, 502		SVIUPA68H-KL	Transistor, Differential Amplifier
Q503, 504, 603, 604		2SA995N-G	Transistor, Current Mirror (Use in ranks F or G)
Q601, 602		SVIUPA68H-KL	Transistor, Differential Amplifier
Q701, 706		2SA1015-Y	Transistor, Regulator (Use in ranks Y or O)
Q702, 705 801~803		2SC1815-Y	Transistor, Regulator and Relay Drive
Q703		2SC1913-R	Transistor, Regulator (Use in ranks Q or R)
Q704		2SA913-R	Transistor, Regulator (Use in ranks Q or R)
DIODES			
D101, 102, 501~504, 601~604, 706, 801, 802		**MA162A**	Diode, Bias
D701~704	⚠	**SVDSR1K2**	Diode, Rectifier
D705		SVDMZ307A	Diode, 7V Zener
D707, 708, 709		**MA27A2**	Diode, Bias
D901		**RVDRD12FB**	Diode, 12V Zener
D902		SVDGL-9PR9	Diode, Operation Indicator (DC)
D903		SVDGL-9HY9	Diode, Operation Indicator (via tone)
D904~919		LN233RP	Diode, Input Selector Indicator
COILS			
L101~104		ELQ5A77	Coil, Choke
L601, 602		**RLQX1013-D**	Coil, Choke

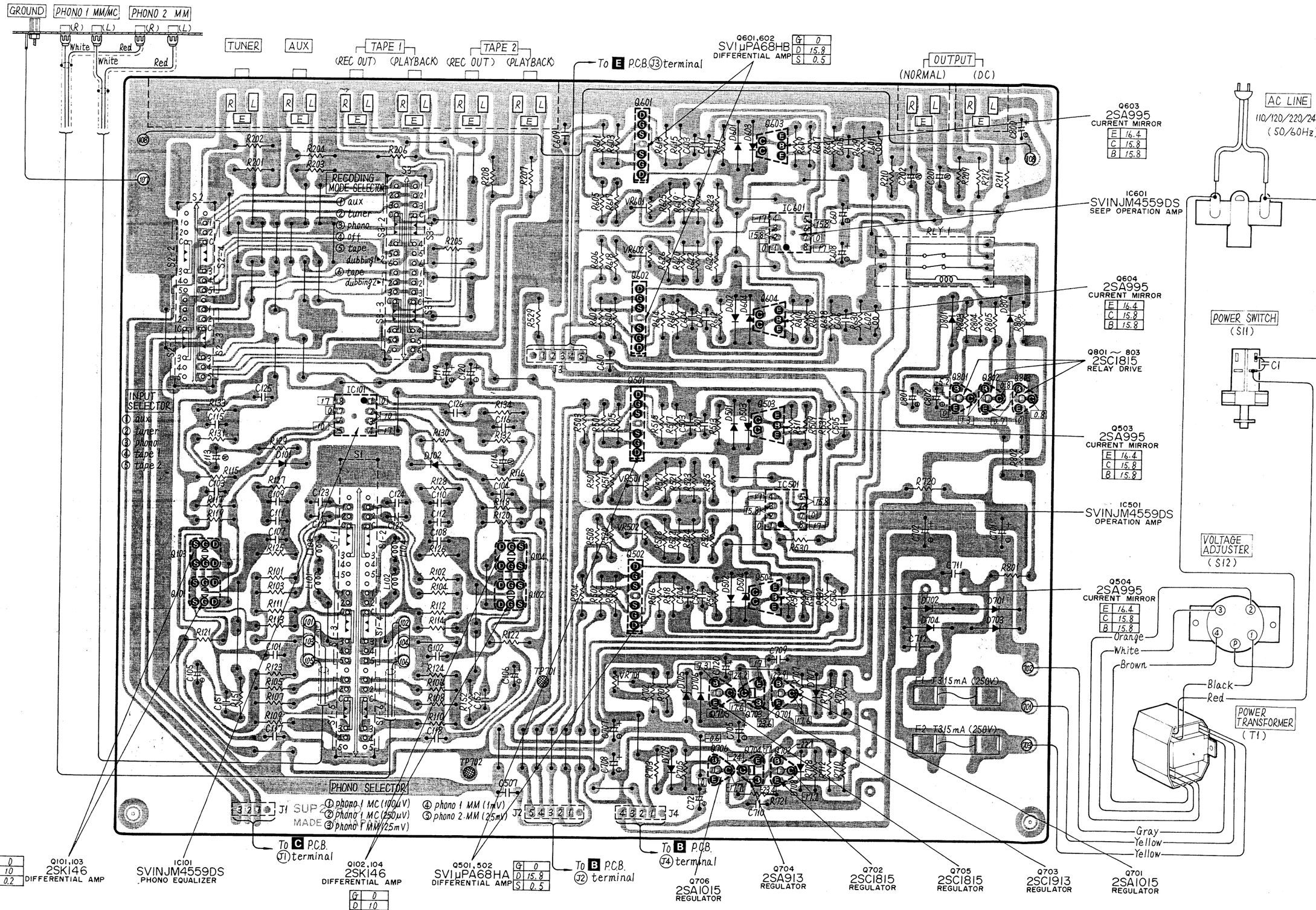
Ref. No.		Part No.	Part Name & Description
TRANSFORMER			
T1	⚠	SLT5J137-W	Transformer, Power Source
VARIABLE RESISTORS			
VR301		EWGHPA065252	Balance Control, 200kΩ(BH)
VR302		EWI6PA0491C3	Volume Control, 200kΩ(C)
VR401		EWGGPY067530	Bass Control, 100kΩ(C)
VR402, 403		EWGGP0067C15	Treble & Super Treble Control, 100kΩ(C)
VR404		EWKKMA065B15	Super Bass Control, 100kΩ(B)
VR501, 502 601, 602		EVMH1GA00B53	DC Balance Adjustment, 5kΩ(B)
VR701		**EVTR4SA00B53**	Voltage Control Adjustment, 5kΩ(B)
FUSES			
F1, 2	⚠	XBA2C03TRO	Fuse, T315mA(250V) P.T. Secondary
SWITCHES			
S1-1~1-6		ESA26523	Switch, Phono Selector
S2-1~2-4, 3-1~3-4		ESA2682	Switch, Input Selector and Record Selector
S4		SSH177	Switch, Muting
S5, 7, 8		SSH395	Switch, Mode and High filter and Subsonic
S6		SSH163	Switch, Operation
S9		SSH165	Switch, Loudness
S10		SSH159	Switch, Turnover
S11	⚠	SSH119	Switch, Power
S11 [XA] only	⚠	ESB9997S	Switch, Power
S12	⚠	ESE372	Switch, Voltage Adjuster
RELAY			
RLY1	⚠	SSY9	Relay, Speaker Protection

Continued on page 17

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM

A Equalizer & flat amplifier circuit

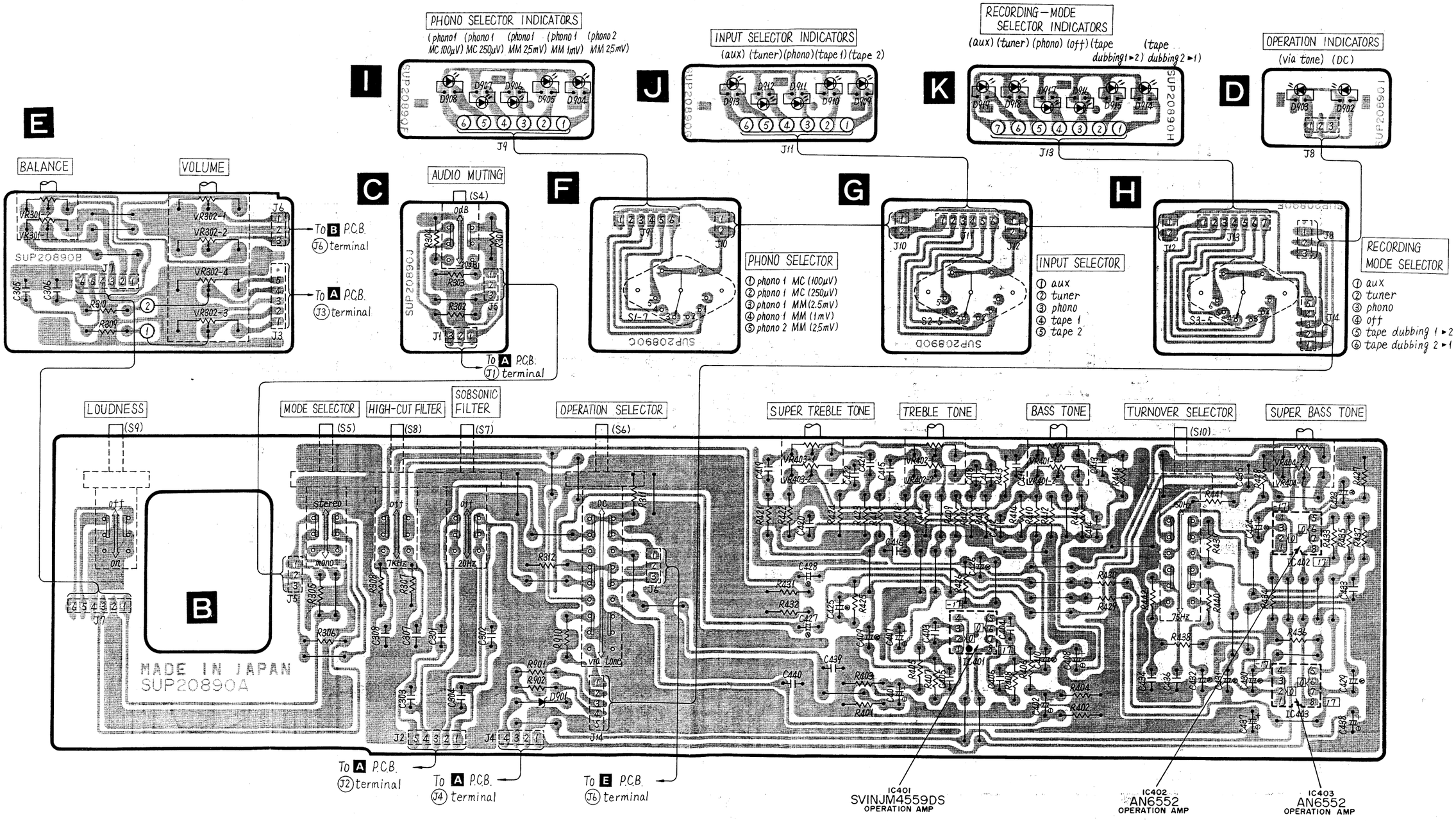
Ground (Earth) lines



B Tone control amplifier circuit **C** Muting switch circuit **D** Operation indicators **E** Volume and balance control circuit

F ~ **K** Selector switch/indicator circuit

Ground (Earth) lines



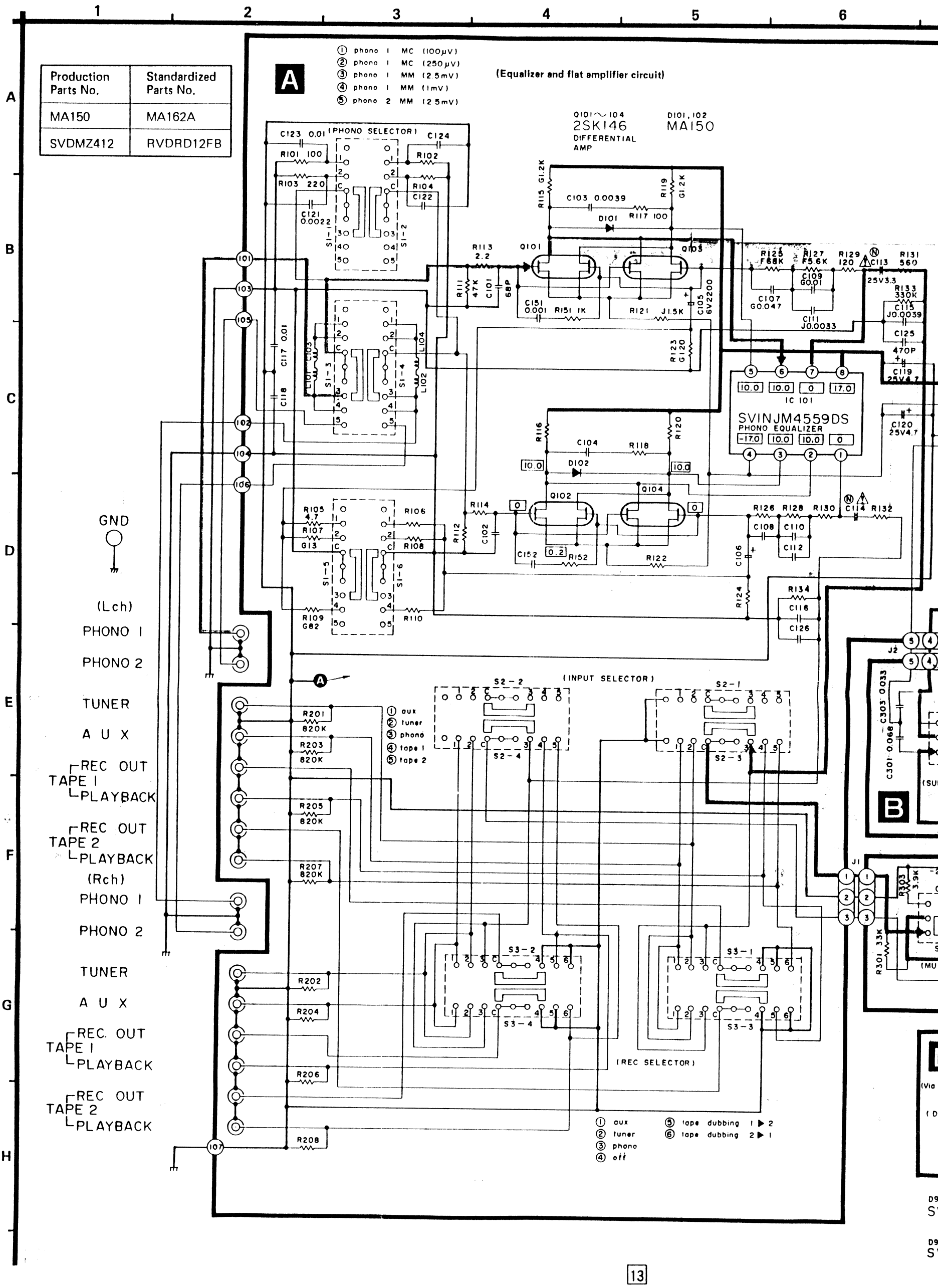
SCHEMATIC DIAGRAM ····· MODEL SU-A6

(This schematic diagram may be modified at any time with the development of new technology.)

Notes:

1. **S1-1 ~ 1-7:** Phono selector switch in "**phono 1 MM (2.5mV)**" position.
   ① phono 1 MC (100μV) ⟷ ② phono 1 MC (250μV) ⟷ ③ phono 1 MM (2.5mV) ⟷ ④ phono 1 MM (1mV) ⟷ ⑤ phono 2 MM (2.5mV)
2. **S2-1 ~ 2-5:** Input selector switch in "**phono**" position.
   ① aux ⟷ ② tuner ⟷ ③ phono ⟷ ④ tape 1 ⟷ ⑤ tape 2
3. **S3-1 ~ 3-5:** Recording-mode selector switch in "**off**" position.
   ① aux ⟷ ② tuner ⟷ ③ phono ⟷ ④ off ⟷ ⑤ tape dubbing 1 ▶ 2 ⟷ ⑥ tape dubbing 2 ▶ 1
4. **S4:** Audio muting switch in "**0dB**" position.
   0dB ⟷ −20dB
5. **S5:** Mode selector switch in "**stereo**" position.
   stereo ⟷ mono
6. **S6:** Operation selector switch in "**DC**" position.
   DC ⟷ via tone
7. **S7:** Subsonic filter switch in "**off**" position.
   off ⟷ 20 Hz
8. **S8:** High-cut filter switch in "**off**" position.
   off ⟷ 7kHz
9. **S9:** Loudness switch in "**off**" position.
   off ⟷ on
10. **S10:** Super-bass turnover selector switch in "**150Hz**" position.
    150Hz ⟷ 75Hz
11. **S11:** Power switch in "**on**" position.
12. **S12:** Voltage adjuster switch in **"240V"** position.
    ① 110V ⟷ ② 120V ⟷ ③ 220V ⟷ ④ 240V
13. ▭ Indicated vo
    impedance) with th
    voltage values, depe
14. ➡ Phono signa
15. ▬ Positive (+B
    ➡ Negative (−
16. Important safety no
    Components identif
    When replacing any

Production Parts No.	Standardized Parts No.
MA150	MA162A
SVDMZ412	RVDRD12FB


A
① phono 1 MC (100μV)
② phono 1 MC (250μV)
③ phono 1 MM (2.5mV)
④ phono 1 MM (1mV)
⑤ phono 2 MM (2.5mV)
(Equalizer and flat amplifier circuit)
Q101~104 2SK146 DIFFERENTIAL AMP
D101, 102 MA150
(PHONO SELECTOR)
IC 101 SVINJM4559DS PHONO EQUALIZER
(INPUT SELECTOR)
(REC SELECTOR)
GND
(Lch)
PHONO 1
PHONO 2
TUNER
A U X
REC OUT TAPE 1 PLAYBACK
REC OUT TAPE 2 PLAYBACK
(Rch)
① aux ② tuner ③ phono ④ tape 1 ⑤ tape 2
① aux ② tuner ③ phono ④ off ⑤ tape dubbing 1 ▶ 2 ⑥ tape dubbing 2 ▶ 1

Indicated voltage values are the standard values for the DC electronic circuit tester (high pedance) with the chassis taken as standard. Therefore, there may exist some errors in the ltage values, depending on the internal impedance of the DC circuit tester.

Phono signal lines of left channel

Positive (+B) voltage lines.

Negative (−B) voltage.

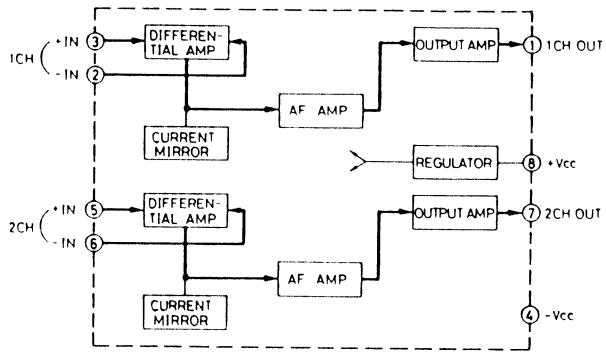
portant safety notice:

mponents identified by ⚠ mark have special characteristics important for safety.

hen replacing any of these components, use only manufacturer's specified parts.

■ BLOCK DIAGRAM OF IC'S

This is the basic block diagram of the inside circuit of IC. In an actual circuit, there may be sometimes idle terminals or some different functions other than the basic circuit.



IC101, 401, 501, 601
(SVINJM4559DS)
Phono equalizer & Operation amplifier

IC402, 403
(AN6552)
Operation amplifier

7 8 9 10 11 12 13

Positive (+17.0V) lines

Q501,502 SVIJPA68HA DIFFERENTIAL AMP

D501~504,601~604 MA150

Q503,504,603,604 2SA995 CURRENT MIRROR

Q601,602 SVIJPA68HB DIFFERENTIAL AMP

Q701,706 2SA1015 REGULATOR

Q704, 2SA913 REGULATOR

D705 SVDMZ307A

D801,802,706 MA150

Q705,801,802,803,702 2SC1815 REGULATOR, RELAY DRIVE

Buffer amplifier DC balance adj.

IC501 SVINJM4559DS OPERATION AMP

IC601 SVINJM4559DS OPERATION AMP

IC401 SVINJM4559DS OPERATION AMP

Voltage regulator adj.

IP701

IP702

Flat amplifier DC balance adj.

Positive (+17.0V) lines

Volume control

Treble tone control

Super-treble tone con

S7 (SUBSONIC FILTER) 20Hz off

S6 (OPERATION)

S4 (MUTING) -20dB 0dB

S5 (MODE) via tone DC

S9 (LOUDNESS) on off

S8 (HIGH FILTER) 7kHz off

mono stereo

Balance control

Bass tone control

Super-bass to

D903 SVDGL-9HY9

D902 SVDGL-9PR9

(Via tone) (DC)

(Tone control amplifier circuit)

f IC. In an actual circuit,
rent functions other than

1CH OUT

IC101, 401, 501, 601
(SVINJM4559DS)
Phono equalizer & Operation amplifier

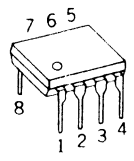
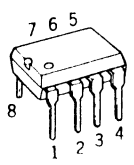
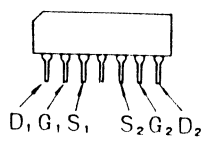
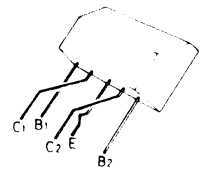
+Vcc

2CH OUT

IC402, 403
(AN6552)
Operation amplifier

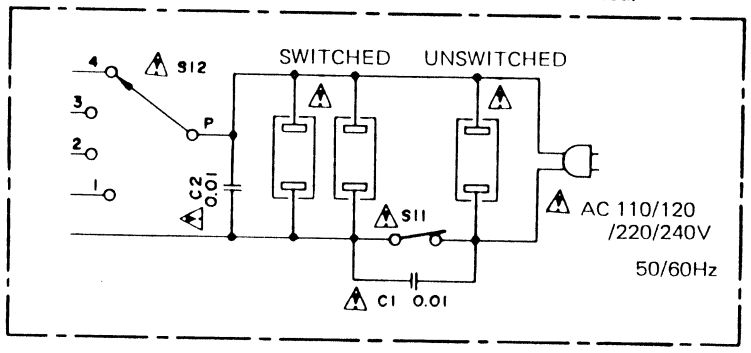
-Vcc

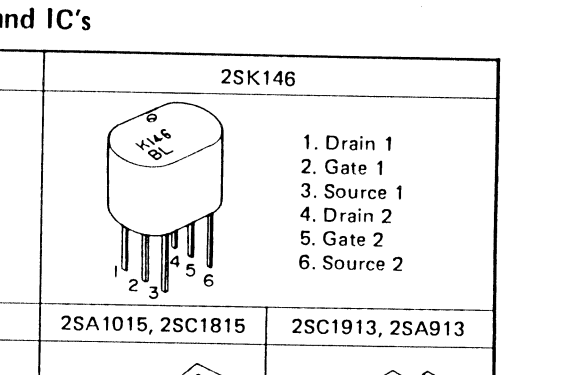
• Terminal guide of transistors and IC's

SVINJM4559DS	AN6552	2SK146	
			1. Drain 1 2. Gate 1 3. Source 1 4. Drain 2 5. Gate 2 6. Source 2
SVIμPA68H	2SA995	2SA1015, 2SC1815	2SC1913, 2SA913
			

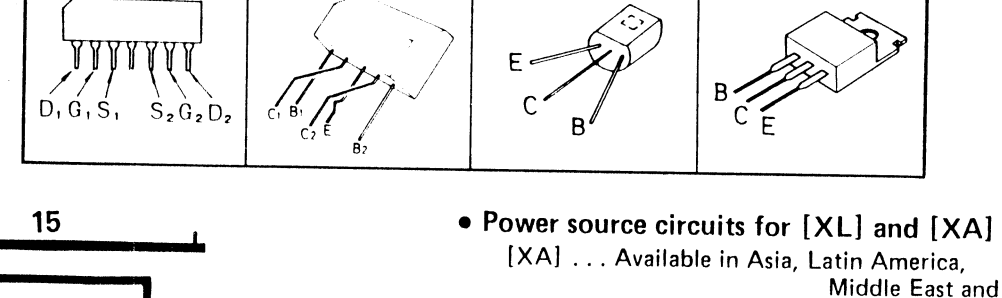
• Power source circuits for [XL] and [XA]

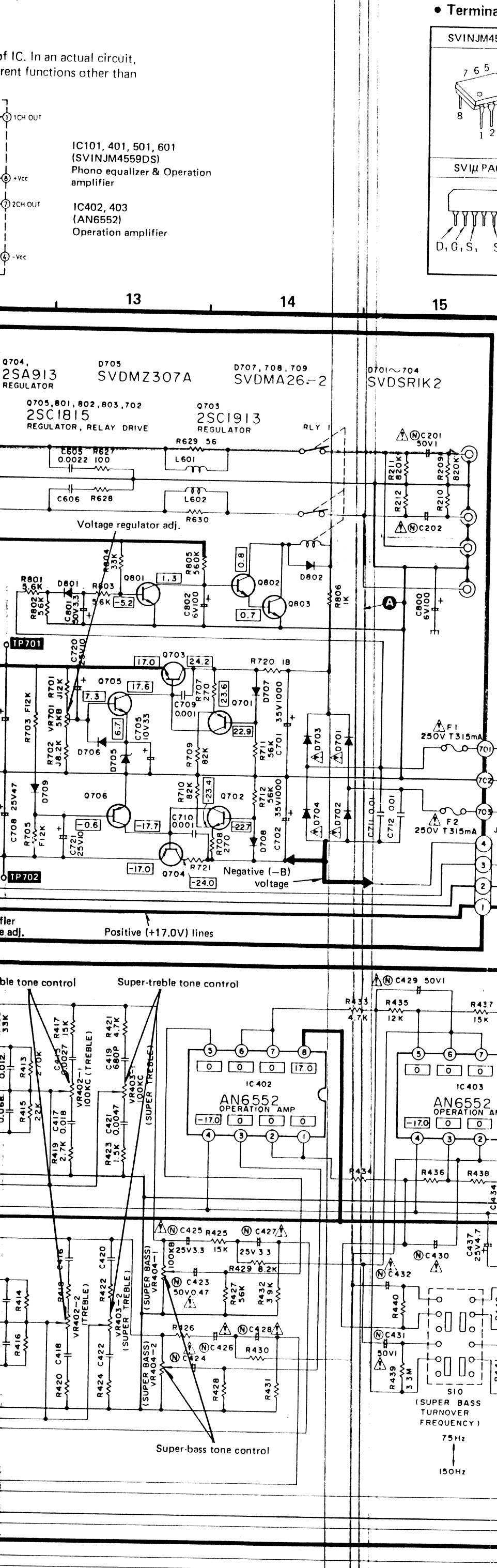
[XA] . . . Available in Asia, Latin America, Middle East and Africa.

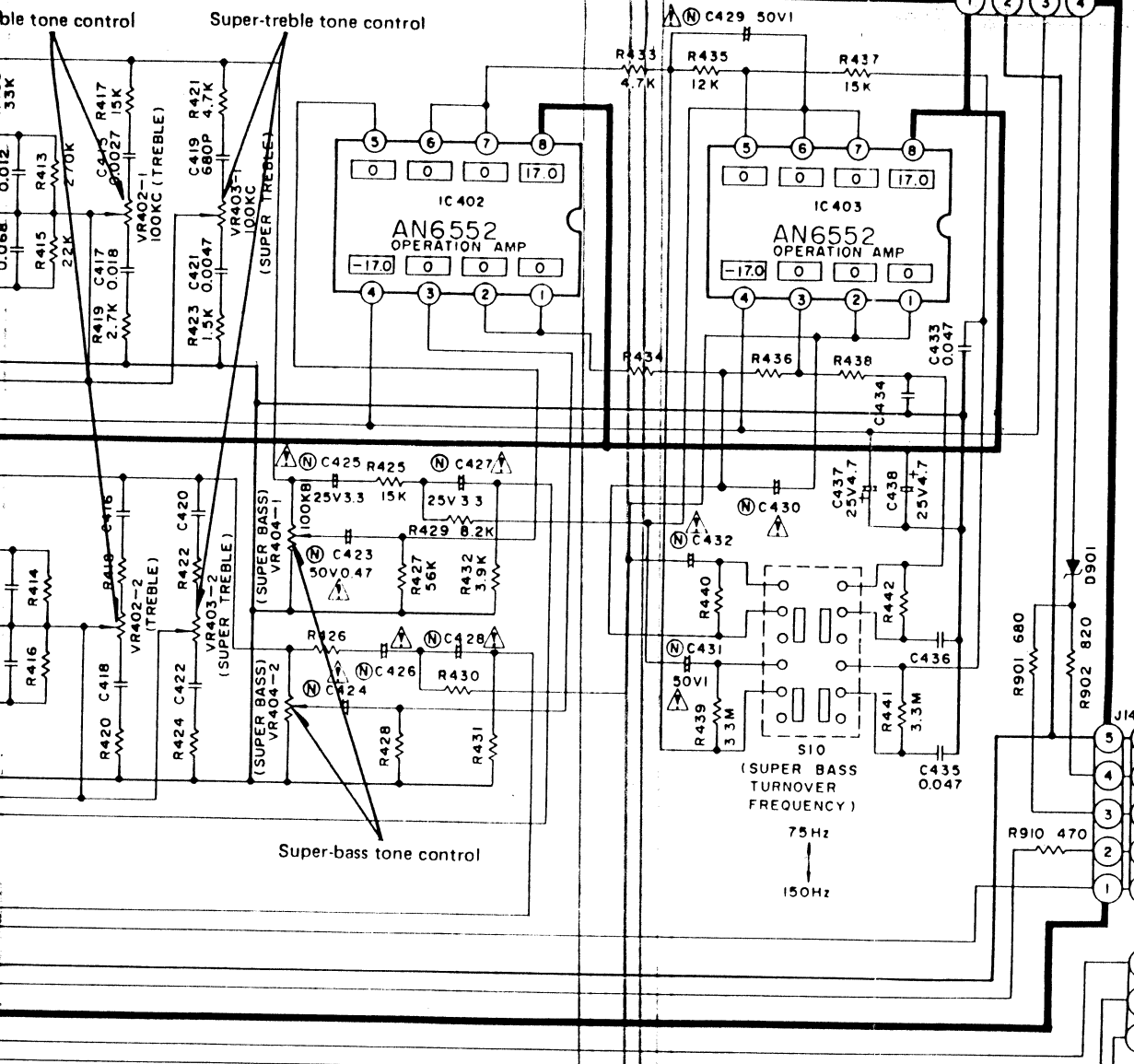


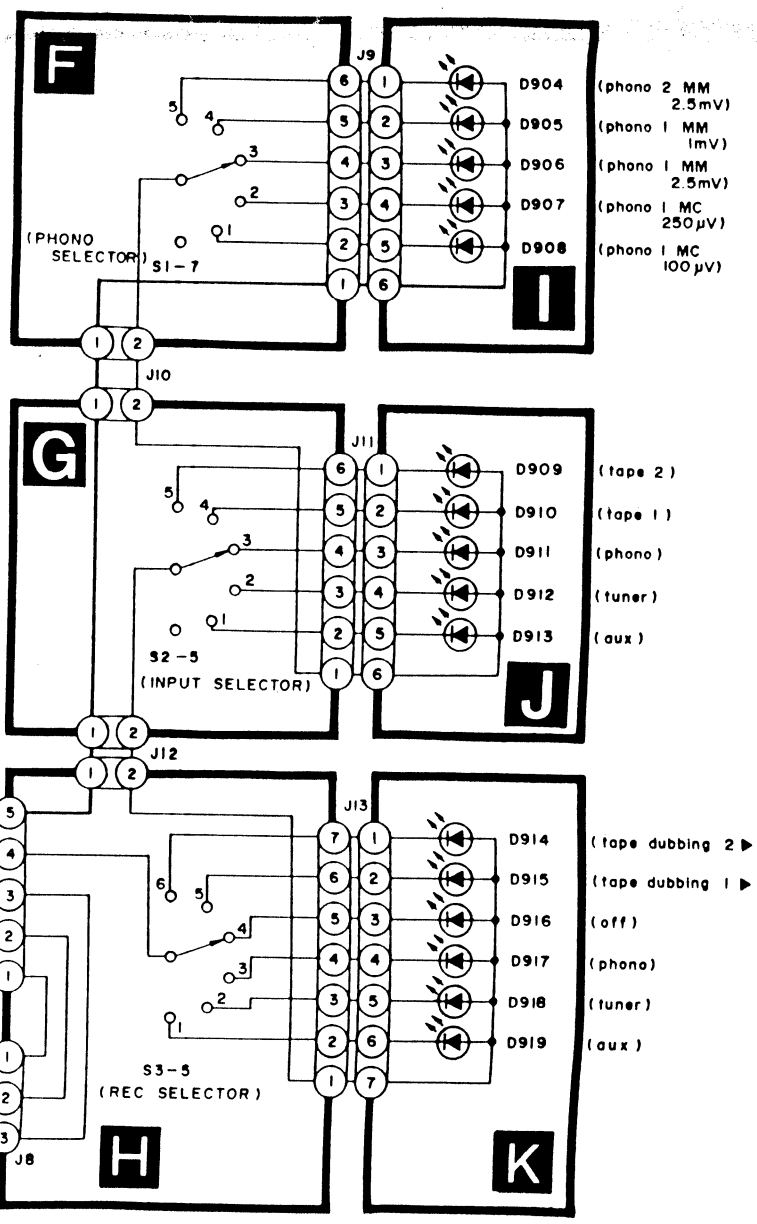


[XL] . . . Available in Australia.









Continued from page 8.

Ref. No.		Part No.	Part Name & Description
RESISTORS			
R101, 102		**ERD25FJ101**	Carbon, 100Ω, 1/4W, ±5%
R103, 104		**ERD25FJ221**	Carbon, 220Ω, 1/4W, ±5%
R105, 106		**ERD25FJ4R7**	Carbon, 4.7Ω, 1/4W, ±5%
R107, 108		**ERO25CKF13RO**	Metal Film, 13Ω, 1/4W, ±1%
R109, 110		**ERO25CKF82RO**	Metal Film, 82Ω, 1/4W, ±1%
R111, 112		**ERD25TJ473**	Carbon, 47kΩ, 1/4W, ±5%
R113, 114		**ERD25FJ2R2**	Carbon, 2.2Ω, 1/4W, ±5%
R115, 116		**ERO25CKF1201**	Metal Film, 1.2kΩ, 1/4W, ±1%
R117, 118		**ERD25FJ101**	Carbon, 100Ω, 1/4W, ±5%
R119, 120		**ERO25CKF1201**	Metal Film, 1.2kΩ, 1/4W, ±1%
R121, 122		**ERO25CKF1501**	Metal Film, 1.5kΩ, 1/4W, ±1%
R123, 124		**ERO25CKF1200**	Metal Film, 120Ω, 1/4W, ±1%
R125, 126		**ERO25CKF6802**	Metal Film, 68kΩ, 1/4W, ±1%
R127, 128		**ERO25CKF5601**	Metal Film, 5.6kΩ, 1/4W, ±1%
R129, 130		**ERD25FJ121**	Carbon, 120Ω, 1/4W, ±5%
R131, 132		**ERD25FJ561**	Carbon, 560Ω, 1/4W, ±5%
R133, 134		**ERD25TJ334**	Carbon, 330kΩ, 1/4W, ±5%
R151, 152		**ERD25FJ102**	Carbon, 1kΩ, 1/4W, ±5%
R201, 202		**ERD25TJ824**	Carbon, 820kΩ, 1/4W, ±5%
R203, 204		**ERD25TJ824**	Carbon, 820kΩ, 1/4W, ±5%
R205, 206		**ERD25TJ824**	Carbon, 820kΩ, 1/4W, ±5%
R207, 208		**ERD25TJ824**	Carbon, 820kΩ, 1/4W, ±5%
R209, 210		**ERD25TJ824**	Carbon, 820kΩ, 1/4W, ±5%
R211, 212		**ERD25TJ824**	Carbon, 820kΩ, 1/4W, ±5%
R301, 302		**ERD25TJ333**	Carbon, 33kΩ, 1/4W, ±5%
R303, 304		**ERD25FJ392**	Carbon, 3.9kΩ, 1/4W, ±5%
R305, 306		**ERD25FJ103**	Carbon, 10kΩ, 1/4W, ±5%
R307, 308		**ERD25TJ824**	Carbon, 820kΩ, 1/4W, ±5%
R309, 310		**ERD25FJ222**	Carbon, 2.2kΩ, 1/4W, ±5%
R311, 312		**ERD25TJ824**	Carbon, 820kΩ, 1/4W, ±5%
R401, 402		**ERD25TJ474**	Carbon, 470kΩ, 1/4W, ±5%
R403, 404		**ERD25TJ474**	Carbon, 470kΩ, 1/4W, ±5%
R405, 406		**ERD25FJ561**	Carbon, 560Ω, 1/4W, ±5%
R407, 408		**ERD25TJ474**	Carbon, 470kΩ, 1/4W, ±5%
R409, 410		**ERD25TJ333**	Carbon, 33kΩ, 1/4W, ±5%
R411, 412		**ERD25FJ562**	Carbon, 5.6kΩ, 1/4W, ±5%
R413, 414		**ERD25TJ274**	Carbon, 270kΩ, 1/4W, ±5%
R415, 416		**ERD25TJ223**	Carbon, 22kΩ, 1/4W, ±5%
R417, 418		**ERD25TJ153**	Carbon, 15kΩ, 1/4W, ±5%
R419, 420		**ERD25FJ272**	Carbon, 2.7kΩ, 1/4W, ±5%
R421, 422		**ERD25FJ472**	Carbon, 4.7kΩ, 1/4W, ±5%
R423, 424		**ERD25FJ152**	Carbon, 1.5kΩ, 1/4W, ±5%
R425, 426		**ERD25TJ153**	Carbon, 15kΩ, 1/4W, ±5%
R427, 428		**ERD25TJ563**	Carbon, 56kΩ, 1/4W, ±5%
R429, 430		**ERD25FJ822**	Carbon, 8.2kΩ, 1/4W, ±5%
R431, 432		**ERD25FJ392**	Carbon, 3.9kΩ, 1/4W, ±5%
R433, 434		**ERD25FJ472**	Carbon, 4.7kΩ, 1/4W, ±5%
R435, 436		**ERD25TJ123**	Carbon, 12kΩ, 1/4W, ±5%
R437, 438		**ERD25TJ153**	Carbon, 15kΩ, 1/4W, ±5%
R439, 440		**ERC14GK335**	Solid, 3.3MΩ, 1/4W, ±10%
R441, 442		**ERC14GK335**	Solid, 3.3MΩ, 1/4W, ±10%
R501, 502		**ERD25FJ100**	Carbon, 10Ω, 1/4W, ±5%
R503, 504		**ERD25TJ124**	Carbon, 120kΩ, 1/4W, ±5%
R505, 506		**ERD25TJ224**	Carbon, 220kΩ, 1/4W, ±5%
R507, 508		**ERO25CKF8201**	Metal Film, 8.2kΩ, 1/4W, ±1%
R509, 510		**ERO25CKF5600**	Metal Film, 560Ω, 1/4W, ±1%
R511, 512		**ERO25CKF5600**	Metal Film, 560Ω, 1/4W, ±1%
R513, 514		**ERD25FJ102**	Carbon, 1kΩ, 1/4W, ±5%
R515, 516		**ERO25CKF2701**	Metal Film, 2.7kΩ, 1/4W, ±1%
R517, 518		**ERO25CKF1502**	Metal Film, 15kΩ, 1/4W, ±1%
R519, 520		**ERO25CKF5602**	Metal Film, 56kΩ, 1/4W, ±1%
R521, 522		**ERO25CKF1001**	Metal Film, 1kΩ, 1/4W, ±1%
R523, 524		**ERO25CKF1001**	Metal Film, 1kΩ, 1/4W, ±1%
R525, 526		**ERO25CKF1802**	Metal Film, 18kΩ, 1/4W, ±1%
R527, 528		**ERO25CKF1802**	Metal Film, 18kΩ, 1/4W, ±1%
R529, 530		**ERD25FJ560**	Carbon, 56Ω, 1/4W, ±5%
R531, 532		**ERD25FJ101**	Carbon, 100Ω, 1/4W, ±5%
R601, 602		**ERD25FJ100**	Carbon, 10Ω, 1/4W, ±5%
R603, 604		**ERD25TJ824**	Carbon, 820kΩ, 1/4W, ±5%
R605, 606		**ERO25CKF8201**	Metal Film, 8.2kΩ, 1/4W, ±1%
R607, 608		**ERO25CKF5600**	Metal Film, 560Ω, 1/4W, ±1%
R609, 610		**ERO25CKF5600**	Metal Film, 560Ω, 1/4W, ±1%
R611, 612		**ERD25FJ821**	Carbon, 820Ω, 1/4W, ±5%
R613, 614		**ERO25CKF3301**	Metal Film, 3.3kΩ, 1/4W, ±1%
R615, 616		**ERO25CKF3001**	Metal Film, 3kΩ, 1/4W, ±1%
R617, 618		**ERO25CKF3902**	Metal Film, 39kΩ, 1/4W, ±1%
R619, 620		**ERO25CKF1001**	Metal Film, 1kΩ, 1/4W, ±1%
R621, 622		**ERO25CKF1001**	Metal Film, 1kΩ, 1/4W, ±1%
R623, 624		**ERO25CKF1802**	Metal Film, 1.8kΩ, 1/4W, ±1%
R625, 626		**ERO25CKF1802**	Metal Film, 1.8kΩ, 1/4W, ±1%
R627, 628		**ERD25FJ101**	Carbon, 100Ω, 1/4W, ±5%
R629, 630		**ERD25FJ560**	Carbon, 56Ω, 1/4W, ±5%

Ref. No.		Part No.	Part Name & Description
R701		**ERO25CKF1202**	Metal Film, 12kΩ, 1/4W, ±1%
R702		**ERO25CKF8201**	Metal Film, 8.2kΩ, 1/4W, ±1%
R703		**ERO25CKF1202**	Metal Film, 12kΩ, 1/4W, ±1%
R705		**ERO25CKF1202**	Metal Film, 12kΩ, 1/4W, ±1%
R707, 708		**ERD25FJ271**	Carbon, 270Ω, 1/4W, ±5%
R709, 710		**ERD25TJ823**	Carbon, 82kΩ, 1/4W, ±5%
R711, 712		**ERD25TJ563**	Carbon, 56kΩ, 1/4W, ±5%
R720, 721		ERD2FCG180	Carbon, 18Ω, 1/4W, ±2%
R801, 802		**ERD25FJ562**	Carbon, 5.6kΩ, 1/4W, ±5%
R803		**ERD25FJ562**	Carbon, 5.6kΩ, 1/4W, ±5%
R804		**ERD25TJ333**	Carbon, 33kΩ, 1/4W, ±5%
R805		**ERD25TJ564**	Carbon, 560kΩ, 1/4W, ±5%
R806		**ERD25FJ102**	Carbon, 1kΩ, 1/4W, ±5%
R901		**ERD25FJ681**	Carbon, 680Ω, 1/4W, ±5%
R902		**ERD25FJ821**	Carbon, 820Ω, 1/4W, ±5%
R910		**ERD25FJ471**	Carbon, 470Ω, 1/4W, ±5%
CAPACITORS			
C1	△	ECKDKC103PF	Ceramic, 0.01μF, 400VAC, $\pm^{100}_{0}$%
C2 [XA] only	△	ECKDKC103PF	Ceramic, 0.01μF, 400VAC, $\pm^{100}_{0}$%
C101, 102		ECCD1H680K	Ceramic, 68pF, 50V, ±10%
C103, 104		ECQM1H392KZ	Polyester, 0.0039μF, 50V, ±10%
C105, 106		**ECEA0JS222**	Electrolytic, 2200μF, 6.3V, ±10%
C107, 108		ECQP1473GZ	Polypropylene, 0.047μF, 100V, ±2%
C109, 110		ECQP1103GZ	Polypropylene, 0.01μF, 100V, ±2%
C111, 112		ECQM1H332JZ	Polyester 0.0033μF, 50V, ±5%
C113, 114	△	ECEA1EN3R3S	Non polar Electrolytic, 3.3μF, 25V
C115, 116		ECQM1H392JZ	Polyester, 0.0039μF, 50V, ±5%
C117, 118		ECKD1H103ZF	Ceramic, 0.01μF, 50V, $\pm^{80}_{20}$%
C119, 120		**ECEA25Z4R7**	Electrolytic, 4.7μF, 25V
C121, 122		ECQM1H103KZ	Polyester, 0.01μF, 50V, ±10%
C123, 124		ECQM1H222KZ	Polyester, 0.0022μF, 50V, ±10%
C125, 126		ECKD1H471KB	Ceramic, 470pF, 50V, ±10%
C151, 152		ECKD1H102KB	Ceramic, 0.001μF, 50V, ±10%
C201, 202	△	ECEA1HN010S	Non polar Electrolytic, 1μF, 50V
C301, 302		ECQM1H683KZ	Polyester, 0.068μF, 50V, ±10%
C303, 304		ECQM1H333KZ	Polyester, 0.033μF, 50V, ±10%
C305, 306		ECQM1H154KZ	Polyester, 0.15μF, 50V, ±10%
C307, 308		ECQM1H103KZ	Polyester, 0.01μF, 50V, ±10%
C401, 402		**ECEA50M1R**	Electrolytic, 1μF, 50V,
C403, 404		ECCD1H390K	Ceramic, 39pF, 50V, ±10%
C405, 406		ECCD1H220K	Ceramic, 22pF, 50V, ±10%
C407, 408		**ECEA50Z1**	Electrolytic, 1μF, 50V,
C409, 410	△	ECEA1EN3R3S	Electrolytic, 3.3μF, 25V
C411, 412		ECQM1H123KZ	Polyester, 0.012μF, 50V, ±10%
C413, 414		ECQM1H683KZ	Polyester, 0.068μF, 50V, ±10%
C415, 416		ECQM1H272KZ	Polyester, 0.0027μF, 50V, ±10%
C417, 418		ECQM1H183KZ	Polyester, 0.018μF, 50V, ±10%
C419, 420		ECKD1H681KB	Ceramic, 680pF, 50V, ±10%
C421, 422		ECQM1H472KZ	Polyester, 0.0047μF, 50V, ±10%
C423, 424	△	ECEA1HNR47S	Non-polar Electrolytic, 0.47μF, 50V
C425, 426	△	ECEA1EN3R3S	Non-polar Electrolytic, 3.3μF, 25V
C427, 428	△	ECEA1EN3R3S	Non-polar Electrolytic, 3.3μF, 25V
C429, 430	△	ECEA1HN010S	Non-polar Electrolytic, 1μF, 50V
C431, 432	△	ECEA1HN010S	Non-polar Electrolytic, 1μF, 50V
C433, 434		ECQM1H473KZ	Polyester, 0.047μF, 50V, ±10%
C435, 436		ECQM1H473KZ	Polyester, 0.047μF, 50V, ±10%
C437, 438		**ECEA25Z4R7**	Electrolytic, 4.7μF, 25V, ±10%
C439, 440		ECCD1H220K	Ceramic, 22pF, 50V, ±10%
C501, 502		ECKD1H681KB	Ceramic, 680pF, 50V, ±10%
C503, 504		ECCD1H470K	Ceramic, 47pF, 50V, ±10%
C505, 506		ECQM1H102KZ	Polyester, 0.001μF, 50V, ±10%
C507		ECKD1H103ZF	Ceramic, 0.01μF, 50V, $\pm^{80}_{20}$%
C601, 602		ECKD1H681KB	Ceramic, 680pF, 50V, ±10%
C603, 604		ECCD1H221K	Ceramic, 220pF, 50V, ±10%
C605, 606		ECQM1H222KZ	Polyester, 0.0022μF, 50V, ±10%
C607, 608		**ECEA25Z4R7**	Electrolytic, 4.7μF, 25V
C609, 610		ECCD1H151K	Ceramic, 150pF, 50V, ±10%
C701, 702		**ECEA1VS102**	Electrolytic, 1000μF, 35V
C705		**ECEA1CS330**	Electrolytic, 33μF, 16V
C707, 708		**ECEA1ES470**	Electrolytic, 47μF, 25V
C709, 710		ECKD1H102KB	Ceramic, 0.001μF, 50V, ±10%
C711, 712		ECKD2H103ZF	Ceramic, 0.01μF, 500V, $\pm^{80}_{20}$%
C720, 721		**ECEA1HS100**	Electrolytic, 10μF, 50V
C800		**ECEA1AS101**	Electrolytic, 100μF, 10V
C801		**ECEA50Z3R3**	Electrolytic, 3.3μF, 50V
C802		**ECEA1AS101**	Electrolytic, 100μF, 10V

Ref. No.		Part No.	Part Name & Description
CABINET and CHASSIS PARTS			
1		SGUUA6N	Control Panel Door Ass'y
2		SBN1001	Knob, Balance, Super Treble, Treble, Bass and Super Bass
3		SBN999	Knob, Volume Control
4		SBN903–4	Knob, Phono Selector, Input Selector and Rec. Selector
5		SGWUA6C	Panel, Front Ass'y
6		SUE23	Escutcheon, (Left)
7		SUB57	Hinge
8		SUB55	Hinge
9		SUS223	Spring
10		SBC313	Button, Control Panel Door Opener
11		SUS159	Spring, Audio Muting Switch
12		SBC219–2	Button, Audio Muting
13		SUS123–2	Spring, Push Switch
14		SBC263	Button, Loudness, Mode, High-cut Filter, Subsonic Filter, Operation and Super Bass Turn over
15		SUS193	Spring, Power Switch
16		SBC261–1	Button, Power Switch
17		SUE25	Escutcheon, (Right)
18		SUB63	Gear
19		SUB59	Gear
20		SHP9317	Cover, Volume and Balance Control
21		SHP9319	Cover, Super Treble, Treble, Bass, Super Treble
22		SHG6127–2	Fiber, LED Indicator Rubber
23		SHG6127–1	Fiber, LED Indicator Rubber
24		SHG1571	Rubber, Cushion LED Indicator
25		SHG1569	Rubber, Cushion LED Indicator
26		ESA3370B	Remote Control, Phono Selector
27		ESA3369B	Remote Control, Input Selector
28		ESA3368B	Remote Control, Rec. Selector
29		SHG6137	Rubber, Power Transformer M'fg
30		SJP1103	Pin Plug, Phono Input Connection
31		SJF2225–1SA	Terminal, Phono 1 Input
32		SJF2043SA	Terminal, Input, Rec Out and Playback
33		SJF3247A	Terminal, Output
34		RJT204A	Ground, Lug
35		SNTA421–1	Washer, Earth Terminal
36		SNE4017–1	Terminal, Earth (Ground)
37		SNEA204–1S	Terminal, Earth (Ground)
38 [E]		SGP2370–2A	Rear Panel
38 [EG,EK, EF,EH,EB]		SGPUA6E	Rear Panel, (SGP2370–2A with Name Plate SGT23530)
38 [XA]		SGP2370–3A	Rear Panel
38 [XL]		SGPUA6L	Rear Panel, (SGP2370–4A with Name Plate SGT23670)
39		SHS1009	Fiber, Rear Panel
40 [XA] only	△	SJS601–1	Socket, AC Outlet
41		SFSR4N4	Bushing, AC Cord
41 [XL] only		SHR131	Bushing, AC Cord
42 [E,EG, EF,EH]	△	**SJA88**	AC Cord, Power Source
42 [EK]	△	**QFC1205M**	AC Cord, Power Source
42 [XA]	△	SJA121	AC Cord, Power Source
42 [XL]	△	**QFC1207M**	AC Cord, Power Source
43		SKC350B2	Cabinet
44		SKU8790–1	Bottom Board
45		SKL247	Foot, Set
46		SUB65	Gear
47		SHR301	Lead Clamper
48		SJS5327	Connector, Lead Wire, 3 Pin
48		SJS5421	Connector, Lead Wire, 4 Pin
48		SJS5519	Connector, Lead Wire, 5 Pin
49		SJS5621	Socket, 6 Pin
49		SJS5703	Socket, 7 Pin
50		SHD3+31S	Spacer, Printed Circuit Board
51 [XA] only		SMX399	Plate, AC Outlet Protection
52		SHG6129	Rubber Cushion, Control Panel Door Opener Button
53		SUV473	Cover, Voltage Adjuster
54		SJR205	Terminal Strip, 2P (Except Product for [XA])
55		SMN1635	Bracket, Voltage Adjuster

Ref. No.		Part No.	Part Name & Description
SCREWS WASHER and NUTS			
❶		**XTB3+8BFZ**	Screw, Tapping, ⊕ 3x8
❷		**XWC3BFZ**	Washer, Toothed, φ3
❸		**XSN3+6S**	Screw, ⊕ 3x6
❹		**XNS8**	Nut, M8
❺		**XWV8**	Washer, Spring, φ8
❻		**XTB3+8BFN**	Screw, Tapping, ⊕ 3x8
❼		**XTV3+8BFN**	Screw, Tapping, ⊕ 3x8
❽		**XWC3B**	Washer, Toothed, φ3
❾		**XNG4ES**	Nut, M4 (Ground Terminal)
❿		**XWC4B**	Washer, Toothed, φ4
⓫		**XTE3+8BFZ**	Screw, Tapping, ⊕ 3x8
⓬		XSS35+12F1S	Screw, ⊕ 5x12
⓭		**XUC3FT**	Circlip
⓮		**XTE3+12BFZ**	Screw, Tapping, ⊕ 3x12
⓯		**XSN3+8BNS**	Screw, ⊕ 3x8
⓰		**XWG3FN**	Washer, Plain, φ3
⓱		**XWA3BFN**	Washer, Spring, φ3
⓲		XTE3+16BFZ	Screw, Tapping, ⊕ 3 x 16
ACCESSORIES			
A1		SJP2239	Cord, Stereo Pin-Type Connection
A2 [XA] only	△	RJP74–1	Plug Adapter, AC Power
A3 [XA] only	△	RJP75	Plug Adapter, AC Power
A4		SJP2239	Cord, Stereo Pin-Type Connection
PACKING PARTS			
P1		SPP289	Polyethylene Bag
P2		SPS2955	Pad, Left Side
P2 [XL] only		SPS2955–1	Pad, Left Side
P3		SPS2957	Pad, Right Side
P3 [XL] only		SPS2957–1	Pad, Right Side
P4 [E,EG,EK, EH,XA,EB]		SPG2887	Carton Box
P4 [XL]		SPG2889	Carton Box
P4 [EF]		SPG2871	Carton Box
P5		SQF10701	Instructions Book, Printed Matter
P5 [XA] only		SQF10703	Instructions Book, Printed Matter

Areas

- [E] and [EG] are available in Scandinavia and European except United Kingdom, France and Holland.
- [EK] is available in United Kingdom.
- [EF] is available in France.
- [EH] is available in Holland.
- [XA] is available in Asia, Latin America, Middle East and Africa.
- [XL] is available in Australia.

Part Name & Description
Panel Door Ass'y
Balance, Super Treble, Treble, Bass
er Bass
Volume Control
Phono Selector, Input Selector and
ector
ront Ass'y
eon, (Left)
Control Panel Door Opener
Audio Muting Switch
Audio Muting
Push Switch
Loudness, Mode, High-cut Filter,
c Filter, Operation and Super Bass
er
Power Switch
Power Switch
eon, (Right)
Volume and Balance Control
uper Treble, Treble, Bass, Super
ED Indicator Rubber
ED Indicator Rubber
Cushion LED Indicator
Cushion LED Indicator
Control, Phono Selector
Control, Input Selector
Control, Rec. Selector
Power Transformer M'fg
Phono Input Connection
l, Phono 1 Input
l, Input, Rec Out and Playback
l, Output
Lug
Earth Terminal
l, Earth (Ground)
l, Earth (Ground)
el
el, (SGP2370–2A with Name Plate SGT23530)
el
el, (SGP2370–4A with Name Plate SGT23670)
ear Panel
AC Outlet
AC Cord
AC Cord
, Power Source
, Power Source
, Power Source
, Power Source
Board
mper
r, Lead Wire, 3 Pin
r, Lead Wire, 4 Pin
r, Lead Wire, 5 Pin
Pin
Pin
rinted Circuit Board
Outlet Protection
ushion, Control Panel Door Opener
oltage Adjuster
Strip, 2P (Except Product for [XA])
Voltage Adjuster

Ref. No.		Part No.	Part Name & Description
SCREWS WASHER and NUTS			
❶		XTB3+8BFZ	Screw, Tapping, ⊕ 3x8
❷		XWC3BFZ	Washer, Toothed, ϕ3
❸		XSN3+6S	Screw, ⊕ 3x6
❹		XN58	Nut, M8
❺		XW78	Washer, Spring, ϕ8
❻		XTB3+8BFN	Screw, Tapping, ⊕ 3x8
❼		XTV3+8BFN	Screw, Tapping, ⊕ 3x8
❽		XWC3B	Washer, Toothed, ϕ3
❾		XNG4ES	Nut, M4 (Ground Terminal)
❿		XWC4B	Washer, Toothed, ϕ4
⓫		XTE3+8BFZ	Screw, Tapping, ⊕ 3x8
⓬		XSS35+12F1S	Screw, ⊕ 5x12
⓭		XUC3FT	Circlip
⓮		XTB3+12BFZ	Screw, Tapping, ⊕ 3x12
⓯		XSN3+8BNS	Screw, ⊕ 3x8
⓰		XWG3FN	Washer, Plain, ϕ3
⓱		XWA3BFN	Washer, Spring, ϕ3
●		XTB3+16BFZ	Screw, Tapping, ⊕ 3 x 16
ACCESSORIES			
A1		SJP2239	Cord, Stereo Pin-Type Connection
A2 [XA] only	⚠	RJP74–1	Plug Adapter, AC Power
A3 [XA] only	⚠	RJP75	Plug Adapter, AC Power
A4		SJP2239	Cord, Stereo Pin-Type Connection
PACKING PARTS			
P1		SPP089	Polyethylene Bag
P2		SPS2955	Pad, Left Side
P2 [XL] only		SPS2955–1	Pad, Left Side
P3		SPS2957	Pad, Right Side
P3 [XL] only		SPS2957–1	Pad, Right Side
P4 [E,EG,EK, EH,XA,EB]		SPG2887	Carton Box
P4 [XL]		SPG2889	Carton Box
P4 [EF]		SPG2871	Carton Box
P5		SQF10701	Instructions Book, Printed Matter
P5 [XA] only		SQF10703	Instructions Book, Printed Matter

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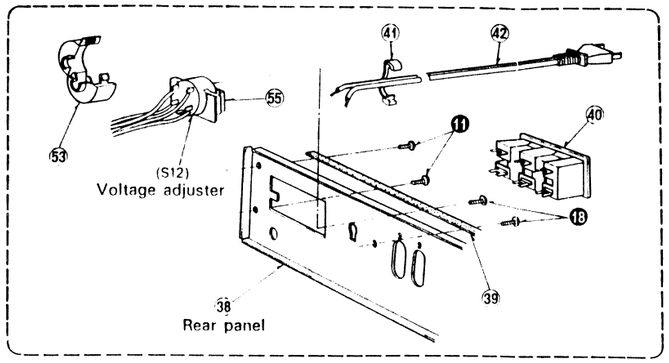
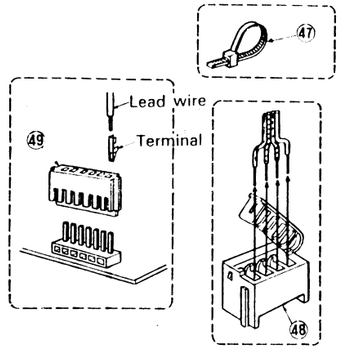
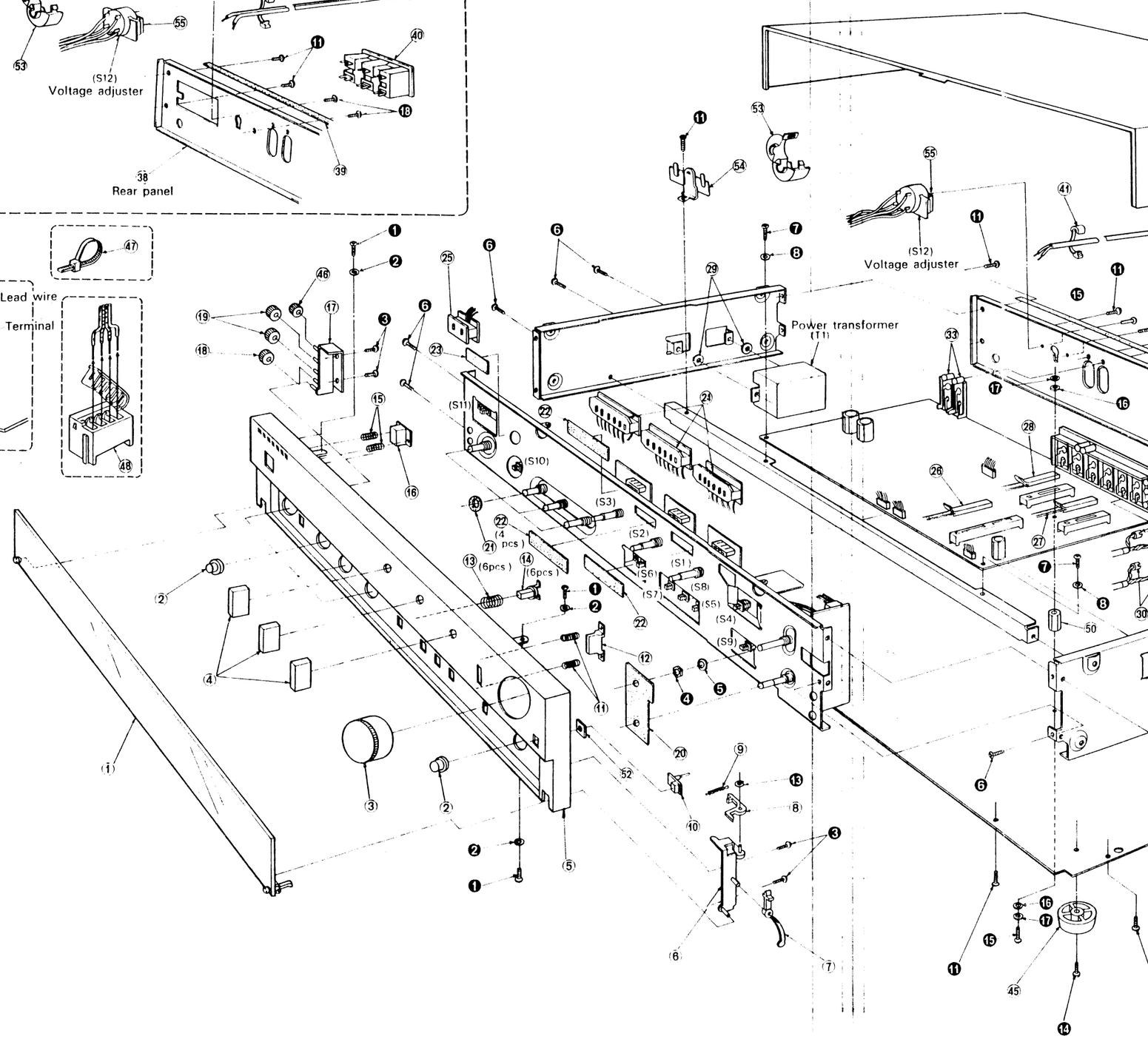
- [XL] is available in Australia.

■ EXPLODED VIEWS

Rear panel and AC outlets .... for [XA] only

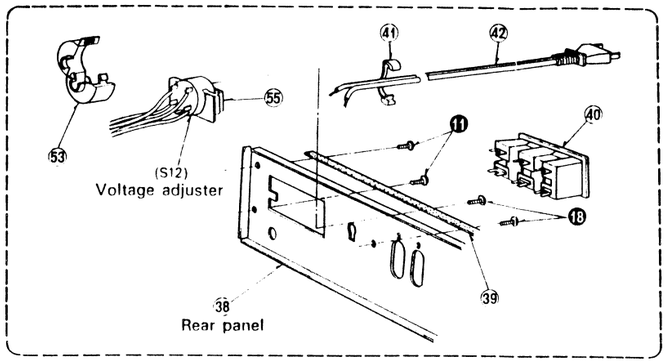


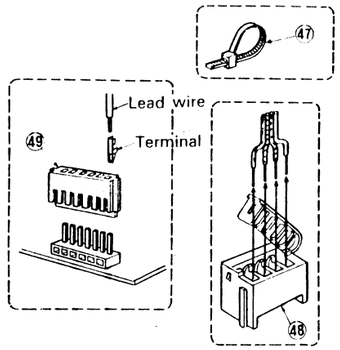


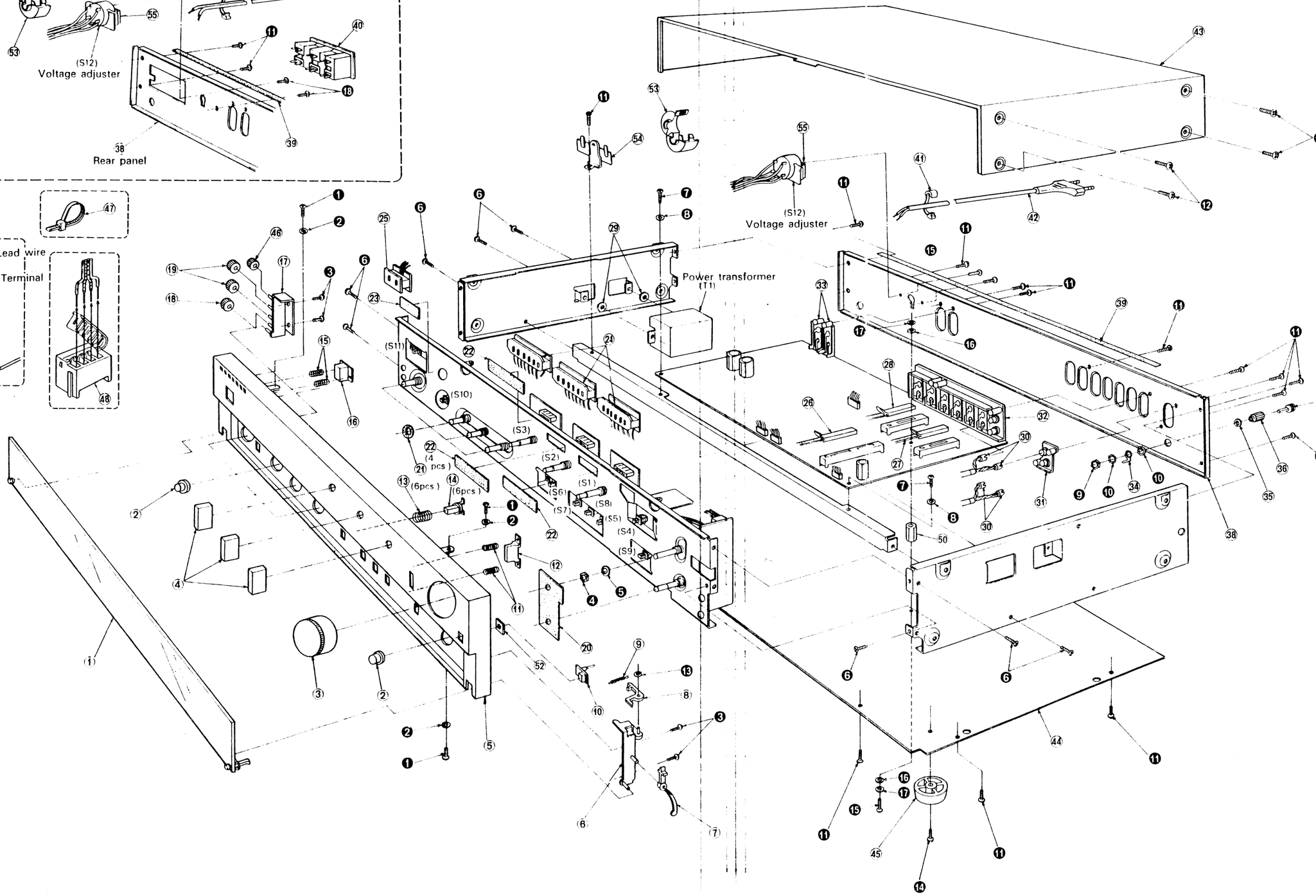


■ EXPLODED VIEWS

Rear panel and AC outlets . . . . for [XA] only







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